

Mr. Jeffrey A. Lindley

32

Disturbance Effects on Least Bell's Vireo. The east end of the proposed project includes building a bridge over the Kern River, and removing and replacing, adjacent to the project site, 0.2 acre of Great Valley cottonwood riparian forest. Least Bell's vireos have been seen on the Kern River in recent years on the south fork of the Kern River above Lake Isabella. Therefore Least Bell's Vireo could recolonize downstream if suitable habitat is available. This project may affect them because creation of new riparian habitat is a difficult task and is not always successful.

Using the Road

Cars and trucks using the road will have effects on endangered and threatened animals. Vehicle strikes will occur with San Joaquin kit fox, blunt-nosed leopard lizard, and Tipton kangaroo rat. In reports from the Department of Energy and from the California Energy Commission for areas in Kern County, vehicle strikes are the second most prevalent cause of death among kit foxes in oil field areas (Service 1998b). Small-scale scientific studies are underway to determine if San Joaquin kit fox will use culverts for crossing under large man-made obstructions. Whether kit fox will use culverts for travel routes has not been demonstrated. Greg Warick, from the Endangered Species Recovery Program, reports that kit fox like to den in 8-inch culverts under access roads on the California Aqueduct. The culverts are 35 feet long, and kit fox will exit from either end of a culvert used for denning. One end of the culvert overhangs a concrete apron on the side of the aqueduct (Greg Warick, personal communication 1999). Cheryl Johnson, also from the Endangered Species Recovery Program, found evidence of feral cats using culverts at the State Route 152 and 33 interchange as part of a Caltrans study. No foxes were found in or near the culverts (Endangered Species Recovery Program 1998). The number of culverts required, their design, and their locations also require further study. The use and design of fences to keep kit fox off the highway and to funnel them to the culverts requires consideration and study. Fences were installed at the Route 152/33 interchange, but their design is not presented in the Caltrans study report, and their usefulness could not be evaluated.

Maintaining the Road

Runoff from the road will contain oil, and will contribute incrementally to soil and water contamination in the vicinity of the road. Spills from accidents on the road will also contribute to environmental degradation in the vicinity of the road, affecting all biota, including protected species.

Animals. Activities involved in maintaining the shoulders and median of the road will effect endangered and threatened animal species. If fences are installed for any reason, they may effect the movement of kit foxes, positively (funneling them toward culvert crossings), or negatively (limiting their ability to move through the area). If fencing is erected to funnel foxes towards culvert crossings, the fences will require maintenance in order to be effective.

Plants. Weedy species on the shoulders and median of the highway can invade neighboring parcels of land, affecting threatened plant species and remnants of natural communities. The area

Mr. Jeffrey A. Lindley

33

where San Joaquin bluecurls, Hoover's eriastrum, and Kern mallow were found, within 100 feet of the project footprint, could be affected by weeds and non-native species from the highway right-of-way. Non-native and weed species on the portion of the highway through the KWB also are of concern.

Cumulative Effects

Cumulative effects include the effects of future State, Tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

Numerous non-federal activities continue to eliminate habitat for the San Joaquin kit fox, blunt-nosed leopard lizard, Tipton kangaroo rat, California condor, least Bell's vireo, Hoover's eriastrum, California jewelflower, Kern mallow, San Joaquin woolly-threads, and Bakersfield cactus in the project area for the State Route 58 corridor. Loss and degradation of habitat affecting both animals and plants continues as a result of urbanization, oil and gas development, road and utility right-of-way management, flood control projects, overgrazing by livestock, and continuing agricultural expansion. Listed and proposed animal species are also affected by poisoning, shooting, increased predation associated with human development, and reduction of food sources.

The current strategy for recovery of listed species is to secure large contiguous blocks of habitat to support core populations. In addition, land connecting the large core areas would be managed to support scattered populations and to serve as corridors between core areas. Rehabilitation of disturbed lands may also be necessary to provide sufficient habitat to support populations that will remain stable in perpetuity.

Agencies and organizations, such as the Service, the California Department of Fish and Game, The Nature Conservancy, and the Center for Natural Lands Management, have begun to secure some of the core lands identified as important for recovery. Several local planning efforts which are focused on reducing the impacts of urbanization and industrialization on listed species are also underway. These positive actions may reduce the likelihood that the continued existence of these species will be jeopardized in the short term. These actions, however, are not expected to be sufficient to lead to the downlisting of these species in the long term, and may not be sufficient to protect the species from jeopardy in the long term.

Conclusion

After reviewing the current status of the blunt-nosed leopard lizard, Tipton kangaroo rat, California condor, least Bell's vireo, San Joaquin kit fox, Hoover's eriastrum, San Joaquin adobe sunburst, California jewelflower, Kern mallow, San Joaquin woolly-threads, and Bakersfield cactus, the environmental baseline for the action area, the effects of the proposed Route 58

Mr. Jeffrey A. Lindley

34

highway project and the cumulative effects, it is the Service's biological opinion that the Route 58 highway project, as proposed, is not likely to jeopardize the continued existence of the listed species covered under this biological opinion, and is not likely to destroy or adversely modify designated critical habitat. No critical habitat has been designated for blunt-nosed leopard lizard, Tipton kangaroo rat, San Joaquin kit fox, therefore, none will be affected. Critical habitat for the California condor has been designated at Tejon Ranch in Southern Kern County and in Kern County rangelands northeast of Bakersfield, however, this action does not affect those areas and no destruction or adverse modification of that critical habitat is anticipated. Critical habitat for the least Bell's vireo has been designated in Santa Barbara, Ventura, Los Angeles, Riverside, San Bernardino, and San Diego Counties, however, this action does not affect those areas and no destruction or adverse modification of that critical habitat is anticipated.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by impairing behavioral patterns including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with this Incidental Take Statement.

The measures described below are non-discretionary, and must be implemented by FHWA so that they become binding conditions of any grant or permit issued to Caltrans, as appropriate, in order for the exemption in section 7(o)(2) to apply. The FHWA has a continuing duty to regulate the activity covered by this incidental take statement. If the FHWA (1) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

Sections 7(b)(4) and 7(o)(2) of ESA do not apply to the incidental take of listed plant species. However, protection of listed plants is provided to the extent that ESA requires a Federal permit for removal or reduction to possession of endangered plants from areas under Federal jurisdiction, or for any act that would remove, cut, dig up, or damage or destroy any such species on any other area in knowing violation of any regulation of any State or in the course of any violation of a State

Mr. Jeffrey A. Lindley

35

criminal trespass law. The California Native Plant Protection Act forbids the take of state-listed plants.

Amount or Extent of Take

Based on information provided in the project biological assessment (Caltrans 1998), information in our files, and through prior consultations, the Service anticipates that the following numbers of kit foxes, leopard lizards, and kangaroo rats may be subject to harm or mortality during proposed remediation and archaeological activities over the life of the project:

1. One (1) San Joaquin kit fox in the form of direct mortality or injury through accidental death during project construction activities.
2. One (1) blunt-nosed leopard lizard in the form of direct mortality or injury through accidental death during project construction activities.
3. One (1) Tipton kangaroo rat in the form of direct mortality or injury through accidental death during project construction activities.

The number of animals subject to incidental take must not exceed the amounts stated above. No take of California condor or least Bell's vireo is authorized.

The number of San Joaquin kit fox, blunt-nosed leopard lizard, and Tipton kangaroo rat subject to harassment from noise, vibrations, and capture or excavation of dens and burrows cannot be estimated because the number of individuals of these species within potential project areas is unknown. Therefore, the Service anticipates and authorizes harassment of all individuals of these federally listed species within 50 feet of the project footprint, provided that such harassment: (1) is the result of bona fide project activities, and (2) that all terms and conditions specified below are fully implemented.

Effect of the Take

The Service has determined that this level of anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

Reasonable and Prudent Measures

The following reasonable and prudent measures are necessary and appropriate to minimize the potential for incidental take of San Joaquin kit foxes, blunt-nosed leopard lizards, and Tipton kangaroo rats authorized by this opinion.

1. Minimize the potential for harm, harassment or killing of federally listed wildlife species from all segments of the proposed project, including the segment across KWBA land.

Mr. Jeffrey A. Lindley

36

2. Minimize the potential for harm, harassment or killing of federally listed wildlife species from growth induced by the highway outside of the boundary of the Metropolitan Bakersfield HCP.
3. Minimize the potential for harm, harassment or killing of federally listed wildlife species during construction of the road.
4. Minimize the potential for harm, harassment or killing of federally listed wildlife species during operation and maintenance of the road.
5. Minimize the potential for inadvertent capture or entrapment of federally listed wildlife species during construction, operation, and maintenance of the road.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of ESA, the FHWA must comply with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are nondiscretionary.

1. The FHWA shall minimize effects on listed species from all segments of the proposed project. Conservation acres, initial management funds, and endowments shall be purchased/set aside for each phase of construction before construction starts.
 1. The portion of the alignment that crosses KWBA lands shall be compensated for at a ratio of 4:1; otherwise the conservation ratios presented in Table 1 shall apply except as noted in 1.b. below. KWBA lands shall be compensated for through the KWBA, if approved by the KWBA. All applicable fees shall be paid, as required by the KWBA. For conservation lands not managed by the KWBA, funds will be set aside for all conservation lands for initial maintenance and for perpetual care of all conservation acreage as required by the conservation bank manager, or, the fund amount required shall be calculated using the method developed by the Center for Natural Lands Management (CNLM)(CNLM 1999). Lands appropriate for satisfying conservation needs are described in the *Recovery Plan* (Service 1998d).
 2. Riparian habitat shall be mitigated at a ratio of 3:1 rather than at the 1:1 ratio in the Project Description. Replacement of riparian habitats at a 1:1 ratio does not take into account the temporal loss of the riparian habitat and its value to wildlife over time. In general, evaluations completed by the Service have shown that riparian habitat replacement should occur at ratios not less than 3:1, unless the replacement habitat has reached its full function and value prior to impacts occurring.

Mr. Jeffrey A. Lindley

37

2. The FHWA shall minimize the negative effects from growth induced by the highway outside of the boundary of the Metropolitan Bakersfield HCP by not constructing the project west of Nord Road until the Kern County Valley Floor HCP, or an HCP that addresses urban development impacts to protected species west of Enos Lane in the west Bakersfield area, has been approved by the Service and implemented. Section 5.4 of the DEIS/EIR identifies that the Caltrans modeled the proposed action and found that the proposed project would distribute growth relatively evenly across the metropolitan area. These results were reviewed by a local panel which determined that the project would not be growth inducing. However, no scientific evidence is presented in the DEIS/EIR to document that the proposed action is not growth inducing.
3. The FHWA shall minimize the potential for harm, harassment, or killing of federally listed wildlife species resulting from project related activities by ensuring implementation of the following during construction phases of the project:
 1. Prior to the initiation of any field work, a Service approved biologist shall conduct an environmental orientation for all project personnel. Topics to be covered shall include descriptions of the listed species, regulations regarding protection of listed species, take avoidance measures to be implemented, reporting procedures if an incidental take occurs, and consequences of non-compliance. Any person working on the project must receive this orientation prior to working on the site.
 2. Preactivity surveys for listed species shall be conducted by a Service approved biologist prior to any ground disturbing activities at the appropriate interval before earthmoving activities start, as found in Service survey protocols and avoidance and minimization protocols. Any listed species or sensitive habitat features observed must be noted and clearly marked. The map of these features shall be submitted to the Service with the preactivity survey report. All relevant field survey data shall be submitted to the CDFG Natural Diversity Database (NDDB), and to the Service.
 3. An exclusion zone shall be established around sensitive habitat features such as kit fox dens, burrows occupied by Tipton kangaroo rats or blunt-nosed leopard lizards. Potential kit fox dens shall be avoided by 50 feet, known kit fox dens shall be avoided by at least 100 feet, active pupping dens shall be avoided by at least 200 feet, and burrows occupied by Tipton kangaroo rats or blunt-nosed leopard lizards, and listed plants shall be avoided by at least 50 feet. If least Bell's vireo are found in the area the Service will be contacted and an exclusion zone will be determined.
 4. If any work has to be conducted near sensitive biological areas or within exclusion zones, a Service approved biologist must monitor work activities to ensure that sensitive resources are not impacted.

Mr. Jeffrey A. Lindley

38

5. Project activities shall be conducted during daylight hours to minimize impacts to listed animals.
 6. Project activities that may result in destruction of blunt-nosed leopard lizard dens and burrows shall be conducted between May 1 and September 30 as much as possible. Project activities that may result in destruction of dens should occur during leopard lizard activity periods, when the air temperatures are between 77 and 95 degrees Fahrenheit (25 to 35 degrees Celsius). This will maximize the leopard lizards' ability to escape from slow-moving vehicles and minimize the risk of accidental entombment in burrows.
 7. All project activities and vehicles shall be limited to existing roads, previously disturbed areas, and the footprint of the project presented to the Service and surveyed by the Service-approved biologist.
 8. All spills of hazardous materials shall be immediately cleaned up to prevent exposure to wildlife.
 9. Pets and firearms shall be prohibited at project sites.
 10. All food-related trash shall be cleaned up and disposed of daily at project sites.
 11. Vehicles must observe a 20-mph speed limit in and around project sites.
 12. Use of rodenticides and herbicides in project areas shall be restricted. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, the California Department of Pesticide Regulation, and by other State and Federal legislation.
 13. Service minimum requirements may change before the highway is fully constructed, and therefore the FHWA shall informally consult with the Service at the start of each segment of the project to determine if reinitiation is necessary.
4. The FHWA shall minimize the potential for harm, harassment, or killing of federally listed wildlife species resulting from project related activities by ensuring implementation of the following during operation and maintenance phases of the project:
- a. Spilled substances shall be promptly cleaned up to avoid chronic or acute poisoning of wildlife.

Mr. Jeffrey A. Lindley

39

- b. Appropriate barriers and devices shall be constructed and maintained to guide kit fox to the culverts installed for their use, as determined by research. Culverts installed for use by kit fox shall be maintained.
- c. Caltrans and FHWA shall apply to the Service to formally consult on the development of a programmatic biological opinion for all highway construction and maintenance in the San Joaquin Valley, and will do research to support the programmatic biological opinion. The research will include the following elements:
 - 1. Data collection and field verification.
 - 2. Preparation of a Biological Assessment, including analyzing and mapping species distribution, mapping distribution of vegetation associations, mapping construction and maintenance projects, estimating potential impacts, developing a conservation strategy, developing a compensation strategy, and developing a monitoring plan.
 - 3. Studying kit fox mortality due to roads and traffic. This includes traffic studies that quantify the traffic and differentiate between different types of roads in performing the analysis of effects on kit fox.
- 2. Studies shall be conducted before and after highway construction to determine the effects of highways on kit fox and the appropriateness of proposed conservation measures. A study plan shall be submitted to the Service for approval prior to the start of the studies. The FHWA shall:
 - 1. Examine and document the movement of San Joaquin kit fox across the entire length of the proposed Route 58 project area.
 - 2. Collect data on kit fox vehicle strikes on highways within the range of the kit fox and assess the data to determine how to minimize vehicle strikes in the design and maintenance of the proposed project.
 - 3. Conduct research on kit fox corridors, including assessing the effectiveness of using culverts for kit fox corridors, and if culverts are effective, determining where to use them, spacing, size, and the use of fences or other devices to control kit fox access to the highway. If the culverts included in the Project Description are found to be inappropriate, FHWA may consult with the Service on this topic.
- 5. A study shall be conducted, at an appropriate time of the year, before construction of the Kern River overpass, to determine the status of least Bell's vireo on the Kern

Mr. Jeffrey A. Lindley

40

River from the outlet of Lake Isabella to Interstate 5. A study plan shall be submitted to the Service for approval prior to the start of the study.

5. The FHWA shall minimize the potential for inadvertent capture or entrapment of federally listed wildlife species during construction activities by ensuring implementation of the following:
 - a. If a kit fox den is present in a work area and cannot be avoided, the den shall be monitored for 3 nights to ensure vacancy, and then must be excavated and backfilled according to Service guidelines (attached as Appendix A to this Opinion.
 - b. If listed rodents or blunt-nosed leopard lizards are observed within designated work areas and cannot be avoided, they shall be captured and relocated by a qualified biologist (who has a current 10(a)(1)(A) permit from the Service authorizing trap, capture, and relocation of these listed species) to outside of the work area to avoid injury or mortality. A relocation plan shall be developed and approved by the Service and CDFG before each phase of construction which shall identify appropriate habitat for release sites and methods for conducting the relocation that are most effective for survival of the individuals involved.
 - c. To prevent entrapment of animals, any trenches or pits more than 2 feet deep that are created during project activities shall be either covered at night, or earthen or wooden escape ramps shall be provided. Before work continues in these areas, trenches and pits shall be inspected by a Service approved biologist to ensure that no animals are present.
4. To prevent entrapment of animals, all construction pipes, culverts, or similar structures with a diameter of 2-inches or greater that are stored at a construction site for one or more overnight periods should be capped and thoroughly inspected for animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If an animal that could be a protected species is discovered inside a pipe, that section of pipe should not be moved until the Service has been consulted. If necessary, and under the direct supervision of a Service approved biologist, the pipe may be moved once to remove it from the path of construction activity, until the animal has escaped.
5. Service minimum requirements may change before the highway is fully constructed, and therefore the FHWA shall contact the Service at the start of each segment of the project to informally consult with the Service and determine if reinitiation is necessary.

Mr. Jeffrey A. Lindley

41

- f. The FHWA shall comply with the Reporting Requirements below.

The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize the impact of incidental take on a species that might result from the proposed action. With implementation of these measures, the Service believes that no more than one San Joaquin kit fox, one blunt-nosed leopard lizard, and one Tipton kangaroo rat will be incidentally taken, and harassment will be minimized. If, during the course of the action, this level of incidental take is exceeded, such incidental take would represent new information requiring review of the reasonable and prudent measures provided. The FHWA must immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the reasonable and prudent measures.

Review Requirement

The requirements of this Biological Opinion will be reviewed at the beginning of construction of each segment of the road for the following reasons:

- The schedule of construction of the road is unknown and could occur over 20 to 50 years,
- Construction and conservation aspects of the project are in the conceptual stage at this time,
- Additional environmental documents, including a Tier II EIR will be produced,
- Service requirements for the protection of endangered species could be different in 20 years than they are now.

These reviews will be initiated by FHWA and reinitiation of consultation is required. Conservation ratios and protection measures may be affected.

Reporting Requirements

The following reporting requirements apply to this project:

- a. Preactivity survey results will be submitted to the Service before any ground disturbing activities start. The preactivity survey will include legible maps of listed species or sensitive habitat features. All relevant field survey data will be submitted to the CDFG Natural Diversity Database (NDDDB), and to the Service. Plant survey sheets for surveys accomplished in 1993 and 1994 have already been received by the Service.
2. Any contractor, employee, or military or agency personnel who inadvertently kills or injures a listed species shall immediately report the incident to their representative. This representative shall contact the CDFG immediately in the case of a dead, injured or entrapped kit fox. The CDFG contact for immediate assistance is State Dispatch at (916) 445-0045 or the Fresno Region 4 Office, (559) 222-3761. Please note the new Fresno area code.

Mr. Jeffrey A. Lindley

42

3. The Sacramento Fish and Wildlife Office and CDFG will be notified in writing within three working days of the accidental death or injury to a listed species during project related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information.
4. Within 90 days of the completion of each portion of the project construction, the Department must submit a post-project compliance report to the Service and CDFG. This report will include dates that work was conducted, compliance performance by workers, any take of listed species, any project effects on listed species including the number of dens or burrows damaged or destroyed, a summary of reclamation activities, and any other pertinent information.
5. If any new habitat disturbance is deemed necessary, the Service and CDFG must be notified prior to the disturbance and a strategy must be identified for providing any required habitat compensation.
6. Within 90 calendar days following the end of each fiscal year, the FHWA must submit to the Service's Sacramento Fish and Wildlife Office a brief annual report detailing the following information: (i) pertinent information concerning the FHWA's success in meeting project conservation measures; (ii) an explanation of failure to meet such measures, if any; (iii) known project effects on federally listed species, including an estimate of the number of kit fox dens and Tipton kangaroo rat dens destroyed, including a general estimate of other small mammal burrows impacted, if any; (iv) known occurrences of incidental take of listed species, if any; and (v) other pertinent information.
7. Results of studies required in Terms and Conditions 4 will be submitted to the Service and CDFG promptly.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities that can be implemented to further the purposes of the Act, such as preservation of endangered species habitat, implementation of recovery actions, or development of information and data bases. Actions the FHWA can take that are necessary to prevent a species from declining irreversibly in the foreseeable future include the following:

1. Coordinate all vegetation management on the right-of-way within the KWB with the KWB and the KWB Vegetation Management Plan.

Mr. Jeffrey A. Lindley

43

2. Report all spills, of materials potentially toxic to plants and wildlife, on the portion of the highway adjacent to or within the watershed of the KWBA to the KWBA.

No additional actions were found in the *Recovery Plan* that were relevant to FHWA or Caltrans actions or that they have the authority to implement. In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, the Service requests notification of the implementation of these conservation recommendations.

REINITIATION--CLOSING STATEMENT

This concludes formal consultation on the action(s) outlined in the request. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

Please contact Susan Jones or Peter Cross of this office at (916) 979-2728, if you have any questions.

Sincerely,

Wayne S. White
Field Supervisor

Enclosures/Attachments

cc: Mary Frederick, Caltrans Project Manager
Dana York, Caltrans Biologist/Environmental Planner
Cheryl Harding, Kern Water Bank Authority
Steve Strait, Kern County Planning Department
Jim Movius, City of Bakersfield Planning Department
Jeff Single, California Department of Fish and Game, Fresno

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Mr. Jeffrey A. Lindley

52

List of Figures and Tables

| | |
|------------|---|
| Figure 1 | Project Location Map |
| Figure 2 | Kern River Alignment and Cross Valley Canal Option |
| Figure 3 | Project Area |
| Figure 4 | 1984 Traffic Congestion Locations |
| Figure 5 | 2010 Circulation Improvements |
| Figure 6 | Land Use Policy Concept |
| Figure 7 | Kern Water Bank |
| Figure 8 | Approximate Route 58 Alignment on the Kern Water Bank |
| Figure 9 | Terrestrial Vegetation Types in the Project Study Area |
| Table 1 | Summary of Potential Impacts and Proposed Mitigation Concepts |
| Table 2 | Riparian Restoration Species List |
| Table 3 | San Joaquin Kit Fox Captures From 1981 to 1996 on the Naval Petroleum Reserve Study Area, Kern County, California |
| Appendix A | Service Kit Fox Den Excavation Procedure |



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846



In reply refer to:
1-1-04-F-0194

FEB 18 2005

(2005)

Mr. Joseph Vaughn
Federal Highway Administration
Department of Transportation
600 Capitol Mall, Suite 4-100
Sacramento, California 95814

Subject: Amendment to Section 7 Biological Opinion on the Proposed Corridor for
State Route 58 between State Route 99 and Interstate 5, Kern County,
California

Dear Mr. Vaughn:

This letter constitutes an amendment to the biological opinion (BO) issued by the U.S. Fish and Wildlife Service (Service) on March 22, 1999 based on information provided in the Tier II Addendum to the Tier I Natural Environment Study Westside Parkway (Report). This amendment is in response to your request dated May 3, 2004, that was received in this office on May 5, 2004, for concurrence that potential effects to listed species from construction of the proposed project were adequately addressed in the BO issued for the Proposed Corridor for State Route 58 between State Route 99 and Interstate 5, Kern County, California (File # 1-1-98-F-0139).

According to your Report, the Tier II project effects are similar to those of the eastern portion of the Tier I effects and all compensation measures outlined in the Terms and Conditions for the Tier I BO either have been or will be implemented prior to construction. Due to the reduction in the standard width of the alignment, the effect to habitat for the Tier II project will be less than the Tier I project effects. Your Report stated that the project will reduce the proposed alignment from 15.6 miles to 8.1 miles in length and to reduce the standard width of the alignment from 298 feet to 210 feet. Our review of the proposed project indicates that the level of incidental take that would occur from the construction of the project as proposed in the Tier II Addendum to the Tier I Natural Environment Study Westside Parkway would not exceed that which was authorized in the BO.

TAKE PRIDE
IN AMERICA

Received

FEB 24 2005

FHWA

Mr. Joseph Vaughn

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Please change the Description of Proposed Action on page 4 of the March 22, 1999, BO from:

The project as developed by Caltrans and the FHWA is to adopt an east-west transportation corridor for State Route 58 (Figure 1) that will:

- 1) provide continuity for State Route 58 in Kern County and
- 2) provide an alignment for future multi-modal transportation facilities that reduces congestion on the transportation network in the western Bakersfield metropolitan area (Caltrans 1998).

The Act's implementing regulations require that the Service address the entire scope of the project, to the extent possible, not just acquisition of a right-of-way. Acquisition of a right-of-way is an irrevocable commitment of funds and the construction of the highway is interrelated and interdependent with acquisition of the right-of-way, as explained in our comments on the DEIS/EIR (Service 1998c). This Biological Opinion addresses build out of the road as much as possible at this stage in the design process, as well as the adoption of a highway alignment.

The proposed project addresses a 16.9 mile section of the highway in Kern County, as shown on Figure 2. From west to east, the segment of Route 58 addressed by this project presently consists of a two-lane conventional highway from Interstate 5 to Allen Road, a four-lane conventional highway from Allen Road to Camino Del Rio Court, and a short six-lane segment between Camino Del Rio Court and Route 99. The existing transportation system in the project area is shown on Figure 3.

The Selected Alternative

The Cross Valley Canal Option is the selected route identified through the DEIS/DEIR process (Caltrans 1997; York personal communication 1998). This alignment begins at Interstate 5, north of the Cross Valley Canal, approximately two miles south of the Stockdale Highway interchange. It parallels the canal in a northeasterly direction to Enos Lane. It then shifts to the south, running parallel to the Cross Valley Canal east to Nord Road. At this point, the alignment bends northward through an urban area east of Heath Road and then crosses the Kern River just west of the existing railroad bridge and runs east, terminating at Route 99 near the present Route 99 overcrossing of Truxton Avenue. Six interchanges are envisioned with the following roads: Enos Lane (Route 43), Nord Road, Allen Road, the vicinity of Calloway Drive, Coffee Road, and Mohawk Street.

The proposed freeway will connect on the eastern end of the project directly to the Route 58 East freeway by ramps running parallel to Route 99. Ramps would also be provided for southbound traffic on Route 99 to access the Route 58 freeways to the east and west without interfering with traffic exiting or accessing Route 99 from Rosedale Highway and California Avenue.

Mr. Joseph Vaughn

3

For purposes of preserving sufficient right-of-way to meet long-term (i.e., 20-year) transportation needs, the alignment will be 300 feet wide. This width provides flexibility in the design of future transportation facilities because it is wide enough to accommodate an eight-lane freeway and a median that could be used for additional lanes or other transportation facilities such as High Occupancy Vehicle (HOV) lanes, busways, and rail up to Route 99. All construction activities will occur within the 300-foot width. Access for construction vehicles will be from the six proposed interchanges with existing north-south roads.

to:

The Westside Parkway project would be constructed between Heath Road and SR99, a distance of approximately 13 kilometers (km) (8.1 miles), in the metropolitan Bakersfield area. Full access interchanges are proposed at Allen Road, Calloway Drive, Coffee Road, and Mohawk Street. At its westerly terminus, the Westside Parkway would tie into Stockdale Highway near Heath Road. At the project's easterly terminus, the Westside Parkway would intersect either with Truxton Avenue or with Oak Street.

The right of way required is generally 64 meters (210 feet) wide, expanding at grade-separations and interchanges to allow for ramps and more extensive grading and narrowing through the Rosedale Rio Bravo Water Storage District (RBWSD) property to 42 meters (138 feet) wide. This width provides flexibility in the design of the ultimate transportation facility because it is wide enough to accommodate an ultimate eight-lane facility.

The Westside Parkway would cross a number of major existing features, such as canals, (Friant-Kern, Carrier, and Cross Valley), roadways, and the Kern River. Grade separations are proposed at Renfro Road and Jewetta Avenue where the Westside Parkway would pass under these local roadways. The Mohawk Street interchange would be created by the extension of existing Mohawk Street. The proposed design would widen Mohawk Street to its full General Plan width of three lanes in each direction plus bicycle lanes from Rosedale Highway, across the Kern River and connecting to a planned parking lot north of Truxton Avenue.

All other sections, including all Terms and Conditions remain the same as in the March 22, 1999, biological opinion.

This concludes formal consultation on the Proposed Corridor for State Route 58 between State Route 99 and Interstate 5, Kern County, California. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or


Mr. Joseph Vaughn

4

critical habitat designated that may be affected by this action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending investigation.

Please contact Shannon Holbrook or Susan Jones (San Joaquin Valley Branch) of this office at (916) 414-6630, if you have any questions.

Sincerely,


Ken Sanchez
Acting Field Supervisor

cc: Annette Tenneboe, CDFG, Fresno



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846



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DEC 11 2008

TRIP

DEC 08 2008

In reply refer to:
1-1-98-F-0139
1-1-04-F-0194
81420-2008-F-0368-27

Zachary K. Parker
Biology Branch Chief
California Department of Transportation, District 6
2015 East Shields Avenue, Suite A-100
Fresno, California 93726

Subject: Request for Amendment of the Biological Opinion 1-1-98-F-0139 and
Amended 1-1-04-F-0194 for the Friant Kern Canal Portion of the Centennial
Corridor Project, Kern County, California

Dear Mr. Parker:

This letter is in response to the electronic request, dated December 5, 2008, sent by the California Department of Transportation (Caltrans) to the U.S. Fish and Wildlife Service (Service) to amend the Biological Opinion (1-1-98-F-0139 and amended 1-1-04-F-0194; B.O.) for the proposed Friant Kern Canal portion of the Centennial Corridor project to allow for twenty-seven (27) nights of nighttime work at the Friant Kern Canal for utility relocation approximately 0.4 miles north of Truxtun Avenue and 0.27 miles east of Coffee Road.

According to the request, due to delays in the start construction date, night work is now be required in order to complete the utility relocation section of the project prior to Friant Canal being filled again. The contract has a completion date of December 31, 2008, and the contractor, Kern Pacific Construction, has indicated that they may need to work seven days each week for possibly 20 hours each day in order to complete this project by the required deadline. This work would require a total of twenty-seven (27) working nights.

The Friant Kern Canal Liner work consists of removing 376 feet of existing canal liner, placing a 30-inch sanitary sewer casing and 12-inch gas casing transverse to the canal (approximately 260 feet of casing), and reconstructing a six-inch thick, reinforced, concrete canal liner. All



Mr. Zachary Parker

3

Please contact Ellen McBride or Susan Jones of this office at (916) 414-6630, if you have any questions regarding this biological opinion.

Sincerely,

A handwritten signature in black ink that reads "Peter A. Cross". The signature is fluid and cursive, with the first name "Peter" and last name "Cross" clearly legible.

Peter A. Cross
Deputy Assistant Field Supervisor

cc: Ted Wright, City of Bakersfield Public Works, Bakersfield

RECEIVED

DEC 11 2008

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Appendix G Site Photographs



Non-native grassland habitat north of Truxtun Avenue and south of the Kern River in Segment 1 of the BSA.



Developed/ornamental area on the north side of Truxtun Avenue west of Mohawk Street in Segment 1 of the BSA.

Site Photographs

Centennial Corridor, Kern County, California

D6-KERN-58 - PM T31.7 to PM 55.6

D6-KERN-99 - PM 21.2 to PM 26.2

Project ID# 06-0000-0484



Appendix G



Kern River (waterway bordered by riparian woodland/Great Valley cottonwood riparian forest) east of State Route 99 in Segment 1 of the BSA. Note: Photo taken in the winter when riparian trees have shed their leaves for winter.



Unvegetated wash/canal with open water in Segment 1 of the BSA waterway.

Site Photographs

Centennial Corridor, Kern County, California

D6-KERN-58 - PM T31.7 to PM 55.6

D6-KERN-99 - PM 21.2 to PM 26.2

Project ID# 06-0000-0484



Appendix G



Agriculture at the intersection of Stockdale Highway and Enos Lane.



Detention basin at the intersection of Stockdale Highway and Enos Lane.

Site Photographs

Centennial Corridor, Kern County, California

D6-KERN-58 - PM T31.7 to PM 55.6

D6-KERN-99 - PM 21.2 to PM 26.2

Project ID# 06-0000-0484



Appendix G

Appendix H Pre-Construction Survey Results for Westside Parkway

EDAW Inc
2022 J Street, Sacramento, California 95811
T 916.414.5800 F 916.414.5850 www.edaw.com

February 6, 2009

Dave Clark
Parsons
900 Truxtun Avenue Suite 201
Bakersfield, CA 93301

Subject: Habitat Assessment of the Westside Parkway Project for the Blunt-Nosed Leopard Lizard (*Gambelia sila*)

Dear Mr. Clark:

At Parson's request, EDAW requested that Paul Pruett and Associates (PPA) provide a habitat assessment of the Westside Parkway project for potential habitat suitability and likelihood of occurrence of the blunt-nosed leopard lizard (*Gambelia sila*) in the project area. The current proposed alignment of the Westside Parkway is approximately 8.1 linear miles between Heath Road and Oak Street, County of Kern, City of Bakersfield, California (Exhibit 1). Lateral improvements are proposed at Heath Road, Renfro Road, Allen Road, Jewetta Avenue, Calloway Drive, Coffee Road, and Mohawk Street. Construction on improvements is currently underway at Allen Road and Mohawk Street. Paul Pruett and Associates provided EDAW with the following evaluation.

Steven Pruett with Paul Pruett and Associates (PPA) reviewed the Endangered Species Formal Consultation on the Proposed Corridor for State Route 58 between State Route 99 and Interstate 5, Kern County, California (BO), United States Fish and Wildlife Service (Service) correspondence, dated 22 March 1999 1-1-98-F-139; the Amendment to Section 7 Biological Opinion (Amendment), FWS correspondence dated 18 February 2005 1-1-04-F-0194; and the Agreement between the California Department of Fish and Game (Department) and the City of Bakersfield (City), Stream Alteration Agreement No. 2008-0064-R4 (Agreement). At EDAW's request, PPA has prepared a habitat assessment and opinion concerning the likelihood for occurrence of *Gambelia sila*, blunt-nosed leopard lizard (BNLL), a federally endangered, state endangered, and state fully-protected species, within the proposed footprint of the Westside Parkway.

The BO addresses impacts to BNLL and corresponding required biological actions on page 31, paragraph 5, "*Disturbance Effects on Blunt-nosed Leopard Lizards, and Tipton Kangaroo Rats*. Blunt-nosed leopard lizards and Tipton kangaroo rats may be adversely affected by vehicle strikes, entombment in burrows, and harassment from noise and vibration. These three species are only likely to be present in the three portions of the project that support grassland and in any adjacent agricultural fields. Caltrans will provide a biological monitor who can remove individuals from harms' way or allow them to escape." (Reference to "these three species" is assumed to be either a typographical error or relative to the inclusion of San Joaquin kit fox discussed in the preceding paragraph of the document).

Associated habitats for BNLL as described in the Service, Recovery Plan for Upland Species of the San Joaquin Valley (Plan) (Service, 1998), include Non-Native Grassland, Valley Saltbush Scrub, and Valley Sink Scrub communities. The BO states on Page 27, in paragraph 5, "grassland areas occur in four locations:

1. To the west of Interstate 5 in the footprint of the proposed interchange;
2. In the area of Enos Lane;

3. In the area near Renfro and Allen Roads; and
4. In the area between 99 and Coffee Road."

When considering the likelihood of species occurrence and, consequently, determining the appropriate level of survey requirements; in addition to general associated habitats as defined in the Plan, we believe it is prudent and necessary to also consider the historic and current site conditions, site habitat impacts, and proximity to historic and current species observations and known extant populations.

The areas west of Interstate 5 and in the vicinity of Enos Lane are no longer included in the revised alignment. The open space between Renfro and Coffee Roads is largely bordered on both sides of the alignment by housing constructed subsequent to the BO. The Non-Native Grassland in these areas can be described as heavily degraded and disturbed as a result of human and feral animal impacts from the surrounding development. The area immediately west and east of Allen Road is operated by the Rosedale-Rio Bravo Water Storage District. This area is intermittently under water recharge and is not suitable habitat for BNLL. The water recharge area also acts as an obstacle between other open areas along the alignment. PPA conducted multiple surveys during 2008 of the area between Calloway Drive and the proposed Crossing of the Kern River at Mohawk Street. The bulk of this area is operated by San Joaquin Facilities Management for oil production. This area is fragmented by the Cross Valley and Friant-Kern Canals, and commercial development south of Rosedale Highway and west of SR99. PPA staff observed no evidence of BNLL during surveys conducted in 2008 in this area.

The most recent California Natural Diversity Database (CNDDB) listing includes nine (09) occurrences for BNLL within the United States Geological Service (USGS) 7.5 min. Gosford Quadrangle and eight adjacent quadrangles. None of these listings are shown as occurring within or in the immediate adjacent areas of the alignment. The most recent occurrence was provided by PPA to the CNDDB in June 2006, about ten (10) miles east of the project, in the rolling foothills immediately east of Bakersfield, in Section 29, T29S, R29E, MDB&M. The closest reported occurrences are a 1991 observation approximately four miles south of the easternmost portion of the Westside Parkway alignment, north of Panama Lane and 1.3 miles of Buena Vista Road, and a 1992 observation about seven miles north of the project and northeast of the intersection of Highway 65 and James Road.

No suitable movement corridors exist along the alignment and no connectivity exists between the proposed alignment and known extant populations of BNLL. No historic or current records exist for BNLL within the Westside Parkway corridor or immediately proximal areas. The current habitat of the site is degraded and disturbed to the extent that it is our opinion that no suitable habitat for BNLL exists within the proposed project area for the Westside Parkway Project. We believe that no likelihood exists for the presence of BNLL within the proposed alignment. PPA respectfully submit that protocol level surveys for *Gambelia sila*, blunt-nosed leopard lizard, are not warranted for development of the current alignment Westside Parkway between Heath Road and SR99.

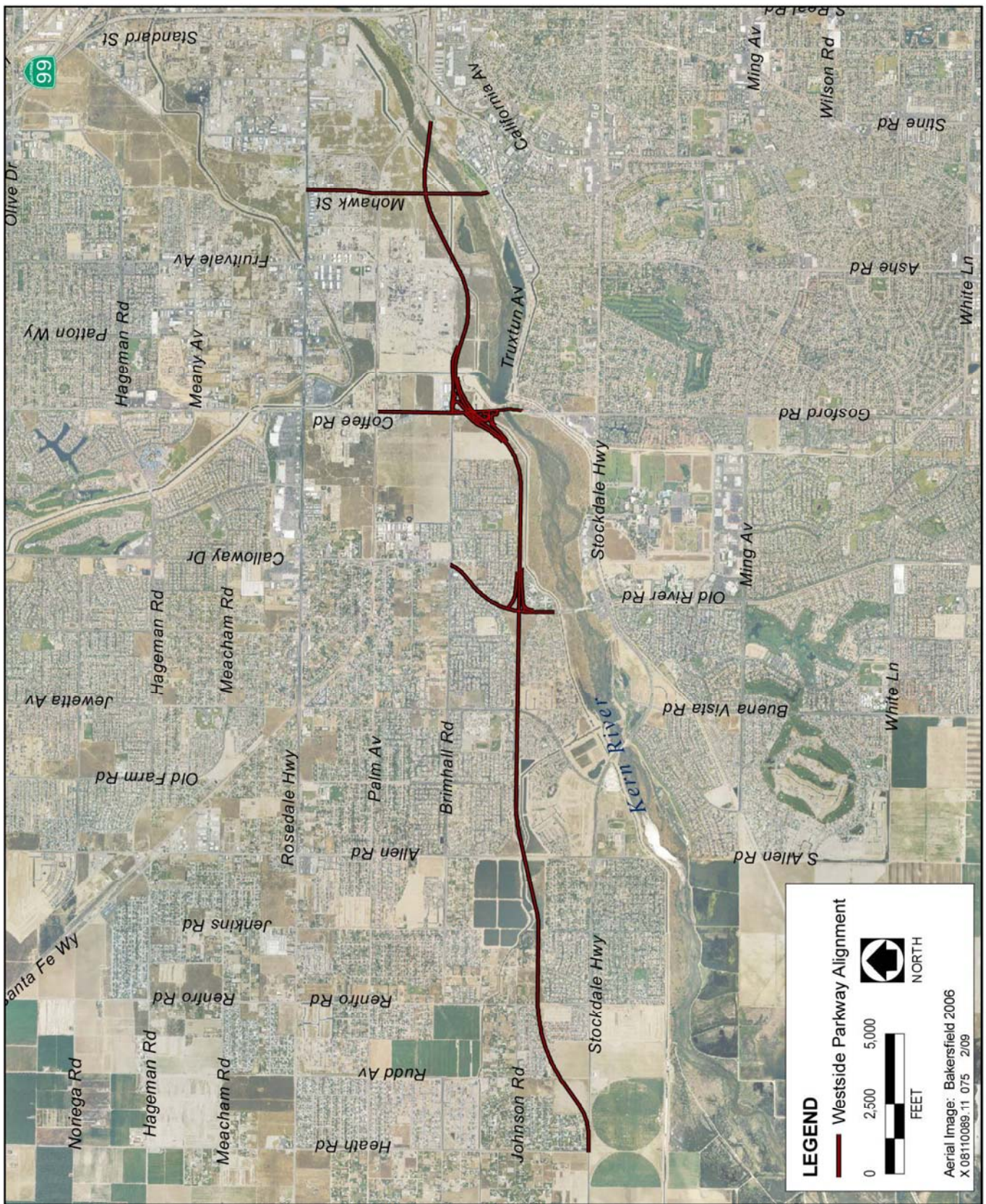
Sincerely,



Stephanie Coppeto
Wildlife Biologist

cc: 08110089.01 / Chron

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Source: Adapted by EDAW 2009

Proposed Alignment of the Westside Parkway

Exhibit 1

Thomas Roads Improvement Program
Westside Parkway Phase 4
Valley Elderberry Longhorn Beetle Biological Assessment



State of California

Department of Transportation, District 6
1352 W. Olive Avenue
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Westside Parkway Phase 4
Valley Elderberry Longhorn Beetle Biological Assessment



Reviewed By: State of California
Department of Transportation, District 6

Name (printed)

Signature

Date

Approved By: State of California
Department of Transportation, District 6

Name (printed)

Signature

Date

TABLE OF CONTENTS

| Section | Page |
|---|-----------|
| 1 INTRODUCTION..... | 1 |
| 1.1 Project Background | 1 |
| 1.2 Purpose of Biological Assessment | 1 |
| 1.3 Species Considered in this Document | 1 |
| 1.4 Consultation to Date | 2 |
| 1.5 Designated Critical Habitat | 3 |
| 2 DESCRIPTION OF THE PROPOSED ACTION | 7 |
| 2.1 Federal Action | 7 |
| 2.2 Action Area | 7 |
| 2.3 Proposed Action | 7 |
| 3 SPECIES ACCOUNT | 13 |
| 4 EFFECTS OF THE PROPOSED ACTION | 14 |
| 4.1 Direct and Indirect Effects | 14 |
| 4.2 Interrelated and Interdependent Effects..... | 14 |
| 4.3 Cumulative Effects | 14 |
| 5 CONSERVATION MEASURES..... | 15 |
| 6 ESA CONCLUSIONS AND DETERMINATION | 16 |
| 7 REFERENCES | 16 |
| Appendix | |
| A Representative Photographs | |
| B Elderberry Field Survey Data Sheet | |

TABLE OF CONTENTS

| Section | Page |
|--|------|
| Exhibits | |
| 1 Westside Parkway Alignment Phases | 5 |
| 2 Regional Location Map..... | 8 |
| 3 Westside Parkway Phase 4 (Truxtun Tie-In) Project Feature Map..... | 9 |
| 4 Westside Parkway Phase 4 (Truxtun Tie-In) Habitat Map | 11 |
| 5 Westside Parkway Phase 4 (Truxtun Tie-In) Topographic Map | 13 |
| Tables | |
| 1 Elderberry Stem Size Classes | 14 |
| 2 Number of Required Elderberry Seedlings and/or Cuttings Plus Other Native Plants | 15 |

1 INTRODUCTION

1.1 PROJECT BACKGROUND

The Thomas Roads Improvement Program (TRIP) is a cooperative effort between the City of Bakersfield, County of Kern, the California Department of Transportation (Caltrans), and the Kern Council of Governments. TRIP is planning to construct several transportation infrastructure improvement projects in Bakersfield. One of these improvements, the Westside Parkway Project (WSP), would consist of a new east-west freeway extending from Truxtun Avenue to Heath Road to be constructed in six phases (Exhibit 1). Construction work would include a six-lane freeway from Mohawk Street to Allen Road (4.25 miles) with full interchanges at Mohawk Street, Coffee Road and Calloway Drive. Construction would also include a bridge over the Kern Parkway at Jewetta Avenue, a signalized intersection at Allen Road, and sound walls adjacent to residential areas. Additional construction activities would extend the WSP west from Allen Road to the Stockdale Highway and Heath Road intersection and east from Mohawk Street to Truxtun Avenue.

Effects to federally listed species that could be associated with WSP construction and operation were evaluated, and the U.S. Fish and Wildlife Service (Service) issued their Biological Opinion (BO) 1-1-98-F-0139 and subsequent amendments (1-1-04-F-0194 and 81420-2008-F-0368). At the time that these BOs were issued, the project was determined to be not likely to adversely affect the federally threatened valley elderberry longhorn beetle (VELB) (*Desmocerus californicus dimorphus*) due to the absence of suitable habitat within the project footprint. Subsequent focused surveys for beetle habitat (i.e., elderberry shrubs) documented a single shrub along the Kern River within the construction footprint associated with WSP Phase 4 (EDAW 2009).

Per the reinitiating-closing statement present within the Biological Opinion (1-1-98-F-0139), reinitiating formal consultation is required where discretionary Federal Agency involvement or control over the action has been maintained and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. Per item 2, Caltrans is requesting reinitiation of this Section 7 process for effects to valley elderberry longhorn beetle.

1.2 PURPOSE OF BIOLOGICAL ASSESSMENT

The purpose of this biological assessment (BA) is to review the proposed WSP, Phase 4 (proposed action) in sufficient detail to provide an assessment of potential project effects on the federally threatened valley elderberry longhorn beetle.

This BA was prepared in accordance with requirements set forth under Section 7 of the federal Endangered Species Act (ESA) (16 U.S. Code [USC] 1536[c]) and the Programmatic BO with USFWS regarding actions that FWHA may take on projects with limited effect on the VELB (USFWS 1997). Under provisions of Section 7(a)(2) of the ESA, a federal agency that permits, licenses, funds, or otherwise authorizes activities must consult with the Service as appropriate, to ensure that its action will not jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat.

1.3 SPECIES CONSIDERED IN THIS DOCUMENT

The VELB is the only federally listed species evaluated in this BA. All other federally listed species potentially occurring within the proposed action area were evaluated under a previous BA prepared for the entire Westside Parkway program area (Woodward-Clyde 1998). Potentially adverse effects to federally listed species were analyzed in previous BOs (1-1-98-F-0139 amended by 1-1-04-F-0194 and 81420-2008-F-0368), and

compensatory mitigation for these effects were required. Previous BOs determined that the WSP was not likely to adversely affect valley elderberry longhorn beetle. Based on new information (i.e., the discovery of one elderberry shrub [*Sambucus mexicanus*] within the WSP Phase 4 construction footprint), the potential for WSP Phase 4 construction activities to adversely affect VELB are now being evaluated.

1.4 CONSULTATION TO DATE

The WSP has been in development since 1991. Consultation among the cooperating local, state, and federal TRIP partners and federal and state resource agencies has been ongoing since this point. The following summarizes significant events during the consultation history for the WSP.

- ▶ May 5, 1994: Caltrans participated in a 404 permit pre-application meeting for the Route 58 Adoption Project I-5 to SR-99 project (a precursor to the WSP) with the U.S. Army Corps of Engineers (USACE), U.S. Environmental Protection Agency (EPA), Federal Highway Administration (FHWA), California Department of Fish and Game (DFG), and the Service.
- ▶ May 23, 1994: The FHWA requested that the Service become a cooperating agency in the development of the Draft EIS/EIR for the WSP and participate in the coordination process as outlined in the Memorandum of Understanding (MOU) among the FHWA, Caltrans, and the Service.
- ▶ Throughout 1996: The Service consulted with Caltrans about several transportation projects in the San Joaquin Valley and suggested that effects on endangered species in the San Joaquin Valley be addressed in a formal programmatic consultation.
- ▶ September 19, 1996: The Service recommends formal programmatic consultation in its BO on a proposed project to repave and widen a portion of State Route 46, between Route 33 and Route 5, in Kern County, California (1-1-96-F-85).
- ▶ June 28, 1997: The Service agrees to participate in preparation of the WSP Draft EIS/EIR as a cooperating agency and provide comments in accordance with the MOU.
- ▶ July 1998: Caltrans, FHWA, and the Kern Council of Governments submit a biological assessment to the Service for the Route 58 Adoption Project (to be known as the WSP project).
- ▶ March 22, 1999: The Service issues its formal programmatic biological opinion for the Route 58 Adoption Project (1-1-98-F-0139).
- ▶ August 29, 2000: The Service makes minor changes to the Terms and Conditions specified in BO 1-1-98-F-0139 in response to FHWA requests (1-1-00-F-0185).
- ▶ February 18, 2005: The Service issues an amended BO to address changes in the WSP project description reducing the length and width of the WSP project (1-1-04-F-0194).
- ▶ December 8, 2009, the Service issued an Amendment to their BO (81420-2008-F-0368) to allow 27 nights of nighttime work on the Friant-Kern Canal portion of the project for utility relocation.
- ▶ June 23, 2009: Caltrans requested the Service amend the BO (1-1-98-F-0139 as amended 1-1-04-F-0194 and 81420-2008-F-0368) to reflect proposed compensation ratios for the Mohawk Street Extension project and future phases of the WSP project. In addition, Caltrans requested the Services approval to compensate for potential effects from the Mohawk Street Extension and Phase 2 and 3 of the WSP project based on proposed habitat impact maps. The Service issued the amended BO in September 2009.

- ▶ July 16, 2009: Caltrans notifies USFWS of presence of VELB within Phase 4 of WSP and requests BO (1-1-98-F-0139 as amended 1-1-04-F-0194 and 81420-2008-F-0368) be amended for effects to VELB for Phase 4 of the WSP on State Route 99 between State Route 99 and Heath Road in Kern County.
- ▶ July 28, 2009: The Service requested a BA to address the effects to the VELB and request to reinstate consultation for this species.

1.5 DESIGNATED CRITICAL HABITAT

Critical habitat is defined in Section 3(5) A of ESA as specific regions in the geographical area occupied by federally-listed species which contain the physical or biological features essential to the conservation of the species and which may require special management considerations or protection. Specific areas outside of the geographical area occupied by the species may also be included in critical habitat designations, upon a determination that such areas are essential for the conservation of the species. Critical habitat has been designated for the VELB (45 FR 52803); however, the critical habitat designation does not include the proposed action area.



Source: Dokken Engineering 2008, Kern County 2007

Westside Parkway Alignment Phases

Exhibit 1

2 DESCRIPTION OF THE PROPOSED ACTION

2.1 ACTION AREA

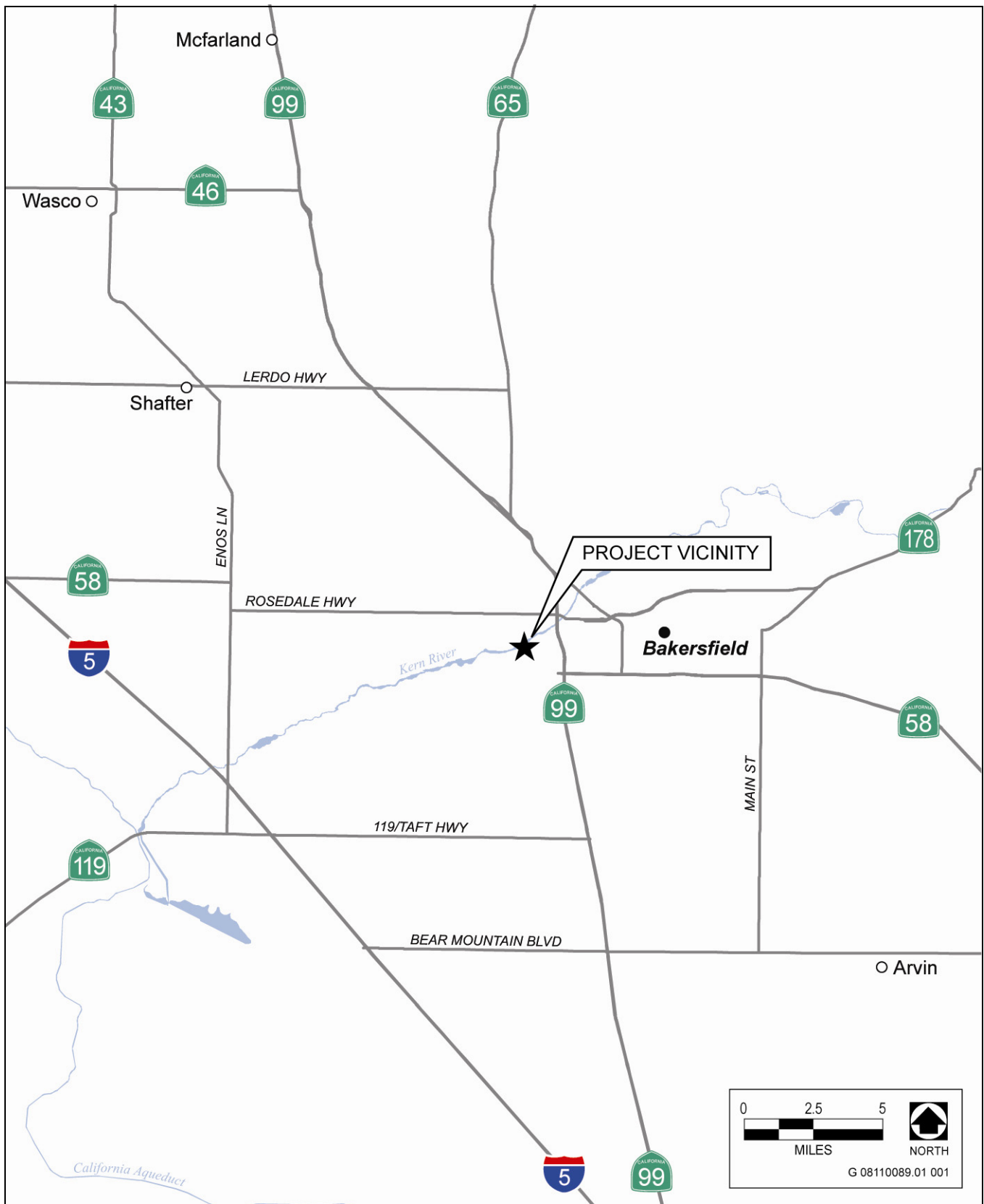
The action area refers to the area that would be directly or indirectly affected by the proposed action. The action area is located in west Bakersfield approximately 1 mile west of State Highway 99 (Exhibit 2) in an area generally south of the Rosedale Highway (SR 58), east of the proposed Mohawk Street interchange and west of the Burlington Northern Santa Fe Railroad Bridge, where the WSP reaches a terminus at Truxtun Avenue (Exhibit 3). The 69-acre action area includes narrow bands of open, scrubby, alluvial woodland adjacent to the Kern River, disturbed areas dominated by ruderal vegetation and non-native grassland, irrigated turf and landscaped areas, and areas of commercial development (Exhibit 4). It also contains a portion of the Cross Valley Canal and Truxtun Avenue (Exhibit 5).

Within undeveloped portions of the action area, vegetation is characterized by a mixture of Fremont's cottonwood (*Populus fremontii*), black willow (*Salix gooddingii*), and mule fat (*Baccharis salicifolia*). Other native plants occurring at much fewer numbers within the action area include common riparian plants such as buttonwillow (*Cephalanthus occidentalis*), California manaroot (*Marah fabaceus*), and creeping wildrye (*Leymus triticoides*). The nonnative and invasive tree tobacco (*Nicotiana glauca*) and tamarisk (*Tamarix ramosissima*) were also observed in the action area as were nonnative herbaceous plants such as red brome (*Bromus madritensis* ssp. *rubens*), black mustard (*Brassica nigra*), and milk thistle (*Silybum marianum*). A single elderberry shrub (*Sambucus* spp.) was also found within the action area (Exhibit 4). Representative photos of natural habitats and the single elderberry shrub observed within the action area are provided in Appendix A.

2.2 PROPOSED ACTION

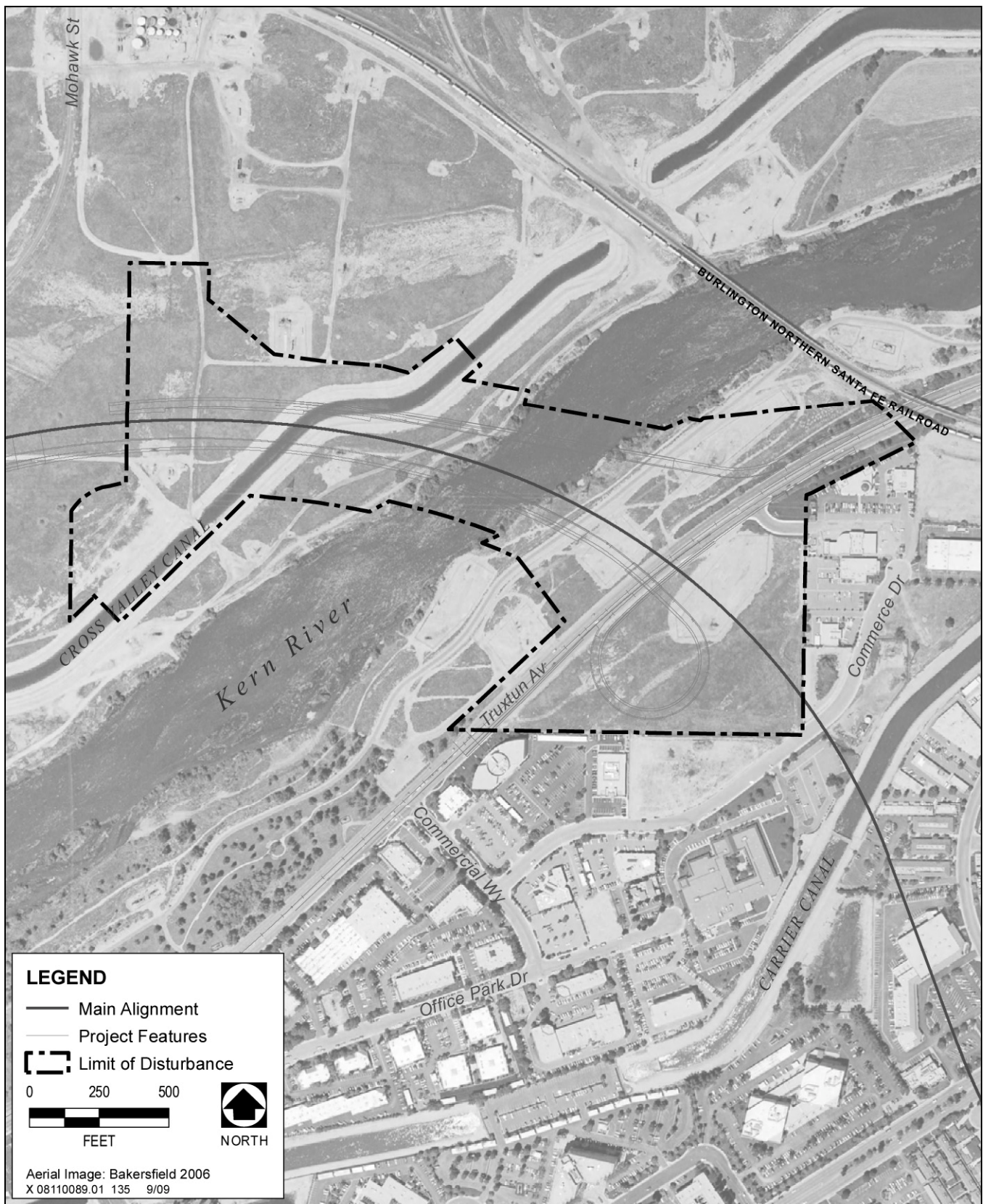
Phase 4 of WSP construction would include two cast-in-place, pre-stressed box girder bridges spanning the Kern River. The northern bridge would be approximately 775 feet long by 39 feet wide and would require five columns, three within the streambed and two within the floodplain. The southern bridge would be approximately 688 feet long by 53 feet wide and would require 15 columns, 12 within the streambed and three within the floodplain. These bridges would accommodate four lanes of traffic, two on each bridge.

Aside from bridge construction, the proposed action would require the construction of temporary haul routes and construction access roads, equipment staging areas, and installation of utility pipelines within the Kern River bed. Permanent effects associated with the proposed action would be limited to construction of the bridge and associated roadways. All utilities would be installed within the disturbance footprint associated with the bridge, and all haul roads and staging areas would be removed and these areas restored to pre-project conditions following project completion.



Regional Location Map

Exhibit 2



Source: Dokken Engineering 2009, EDAW 2009

Westside Parkway Phase 4 (Truxtun Tie-In) Project Feature Map

Exhibit 3



Source: Dokken Engineering 2009, EDAW 2009

Westside Parkway Phase 4 (Truxtun Tie-In) Habitat Map

Exhibit 4

3 SPECIES ACCOUNT

The VELB require elderberry shrubs (*Sambucus* spp.) for food and reproduction, and all life stages of the species rely on elderberry shrubs exclusively. Females lay their eggs on the bark. Upon hatching, larval beetles burrow into the pith of the stem (stems generally must be 1 inch in diameter to provide suitable habitat for larval beetles) where they remain for up to two years. Near the end of their lifespan, larval beetles burrow through the stem, creating a characteristic oval exit hole, and quickly morph through the pupal stage into adults. Adults are active (feeding and mating) from March to June after which they die. Direct evidence of shrub occupation (i.e., observations of adult beetles) is rarely documented, and the most direct evidence of shrub occupation is the characteristic exit hole created by the larva during emergence from the stem. Loss of riparian habitat and non-riparian habitats where elderberry shrubs occur has resulted from conversion of these habitats to developed and agricultural land uses and has greatly reduced the availability of suitable habitat for the beetle and fragmented remaining areas of suitable habitat (USFWS 1997).

4 EFFECTS OF THE PROPOSED ACTION

4.1 DIRECT AND INDIRECT EFFECTS

Surveys for VELB were conducted in April 2009 following the USFWS guidelines (USFWS 1999). A single elderberry shrub was identified within the action area and would be required to be removed to accommodate roadway and bridge construction. This shrub was surveyed, mapped, photographed, and data on stem number, diameter and presence of exit holes were recorded (Table 1, Exhibit 4, Appendix A, Appendix B). A single exit hole was observed on the shrub.

| Table 1 Elderberry Stem Size Classes | |
|---|------------|
| Stem Size Class | Stem Count |
| >=1" & < 3" | 37 |
| >=3" & < 5" | 10 |
| >=5" | 10 |

Indirect effects to VELB include disturbances to adjacent riparian habitat with the potential to support elderberry shrubs in the future and, therefore, provide potential beetle habitat. There is 0.39 acre of natural habitat (i.e., undeveloped land) present within 50 feet of the lone elderberry shrub within the action area. Approximately 0.29 acre of this habitat is non-riparian habitat (i.e., open, weedy disturbed areas) with limited potential to support the beetle, and 0.10 acre of this habitat is characterized by willows and cottonwood that could provide marginally suitable beetle habitat. A total of 1.67 acres of riparian habitat is present within the 69-acre action area footprint, all of which is scrubby, disturbed alluvial woodland. There are no other elderberry shrubs within the action area nor are any other elderberry shrubs known from within 2,000 feet of the action area.

4.2 CUMULATIVE EFFECTS

Cumulative effects include effects of future state, tribal, local, or private actions that are reasonably certain to occur within the action area under consideration. Future federal actions within the action area that could potentially result in cumulative effects to federally listed species are not expected to occur following completion of the proposed action. Actions that are not subject to federal authorization or funding and that may alter the

habitat or increase the incidental take of a federally listed species (and that therefore would have cumulative effects relative to the proposed action) are also not expected to occur within the action area.

5 CONSERVATION MEASURES

Because adverse effects to the VELB would not be avoided within the action area, the following conservation measures would be implemented in compliance with Service and FHWA guidelines (USFWS 1999, FHWA 2002). The project meets the criteria for programmatic consultation with USFWS regarding actions that FWA may take on projects with limited effect on the VELB (USFWS 1997). Mitigation would involve the following:

- ▶ Transplantation of the elderberry shrub to Service-approved mitigation site that includes the proposed action area within its service area, currently proposed to be the French Camp Conservation Bank in San Joaquin County. The elderberry shrub will be transplanted when the plant is dormant. A qualified biologist will determine if the plant is dormant and monitor the transplanting activities to ensure that they comply with Service guidelines. If transplantation is not feasible during the dormant period (i.e., because of timing constraints), the number of elderberry seedlings and associated native plants (see Table 2 below) will be increased to an appropriate amount, based on consultation with the Service. If mitigation credits from a Service-approved bank are not available, the following measures would be implemented.
 - Installation of elderberry seedlings (or cuttings) and seedlings of associated native riparian plants along with the transplanted shrub at a Service-approved mitigation site. The number of required elderberry seedlings and seedlings of other native plants that will be required is specified in Table 2. A qualified biologist will oversee the installation of seedlings and elderberry cuttings to ensure that plants are installed and watered correctly.
 - Establishment of a mitigation area at least 3.6 acres in size. A mitigation area of at least 3.6 acres would be required based on the total number of mitigation plants required (Table 2).
 - Annual maintenance (e.g., trespass control, weed treatment, trash removal), monitoring, and reporting. Maintenance will be required in perpetuity; monitoring and reporting will be required for either 10 consecutive years or seven of the first 15 years following shrub transplanting and seedling installation. Monitoring and reporting will follow Service guidelines (USFWS 1999). If less than 60% of the seedlings are alive and in good health at any time during the 10 (or 15) year monitoring period, additional remedial measures (i.e., installation of new seedlings) will be required to meet or exceed the 60% threshold.

Table 2
Number of Required Elderberry Seedlings and/or Cuttings Plus Other Native Plants¹

| Stem Size Class | Stem Count | Required Elderberry Seedlings | Required Other Plant Seedlings |
|-----------------|------------|-------------------------------|--------------------------------|
| >=1" & < 3" | 37 | 148 | 296 |
| >=3" & < 5" | 10 | 60 | 120 |
| >=5" | 10 | 80 | 160 |
| Total | | 288 | 576 |

¹Number of required seedlings based on USFWS (1999) guidelines

6 ESA CONCLUSIONS AND DETERMINATION

The federally listed species, VELB, may be affected by the proposed project construction activities. Thus, formal consultation with the USFWS under Section 7 of the Endangered Species Act is required.

A determination of “may affect, likely to adversely affect” is proposed for the VELB since one elderberry shrub will be removed from the action area and transplanted at an appropriate mitigation area to be preserved in perpetuity (USFWS 1999). This elderberry shrub did exhibit potential VELB exit holes.

7 REFERENCES

- EDAW. 2009. *Revised VELB Survey Results, Phase Four Thomas Roads Improvement Program*. Sacramento, CA. Memorandum report prepared for Mr. David Clark, Environmental Program Manager, Thomas Roads Improvement Program. Bakersfield, CA.
- Federal Highway Administration. 2002 (July 25). *Revised Policy on VELB Effects and Compensation*. Letter to Mr. Jeff Morales, Director, California Department of Transportation. Sacramento, CA.
- USFWS. 1999. *Conservation Guidelines for the Valley Elderberry Longhorn Beetle*. Revised July 9. Sacramento, CA.
- USFWS. 1997. *Formal Programmatic Consultation Permitting Projects with Relatively Small Effects on VELB Within the Jurisdiction of the Sacramento Field Office, California*. Letter 1-1-96-F-156 to David H. Densmore U.S. Department of Transportation, Federal Highways Administration, March 11, 1997.
- Woodward-Clyde. 1998. Biological Assessment Route 58 Adoption Project I 5 to SR 99. Oakland, CA. Prepared for Caltrans, Federal Highway Administration, and Kern Council of Governments. Bakersfield, CA.

APPENDIX A

Representative Photographs



Representative stem hole resembling VELB exit hole.



Elderberry shrub within WSP Phase 4 footprint



Representative photograph of riparian habitat within WSP Phase 4 footprint.

APPENDIX B

Elderberry Field Survey Data Sheet

VALLEY ELDERBERRY LONGHORN BEETLE SURVEY FORM, CALTRANS DISTRICT 6

PROJECT: TRIP Phase 4 DATE: 4/9/09 OBSERVER(S): Matt Wacker EDAW AECOM

EA# COUNTY: Kern ROUTE: Westside Pkwy. PM(s): /

LOCATION: NE 1/4 of SE 1/4 OF SECTION 27, RANGE 27, TOWNSHIP 29

SHRUB# 1 SHRUB DIAM: c. 12' SHRUB HT: c. 10' CONDITION (P,F,G): F PHOTO#: 1, 2

TOTAL # STEMS (MAXIMUM DIAMETER AT GROUND LEVEL) $\geq 1''$ & $\leq 3''$ 37TOTAL # STEMS (MAXIMUM DIAMETER AT GROUND LEVEL) $> 3''$ & $< 5''$ 10TOTAL # STEMS (MAXIMUM DIAMETER AT GROUND LEVEL) $\geq 5''$ 10HABITAT PRESENT (CIRCLE ONE): ☒ RIPARIAN, ☐ NON-RIPARIAN TOTAL # EXIT HOLES: 1

NOTES:

Very large, old shrub with numerous dead stems - very difficult to completely survey for exit holes. 1 hole noted but others probably present.

SHRUB# SHRUB DIAM: SHRUB HT: CONDITION (P,F,G): PHOTO#:

TOTAL # STEMS (MAXIMUM DIAMETER AT GROUND LEVEL) $\geq 1''$ & $\leq 3''$ TOTAL # STEMS (MAXIMUM DIAMETER AT GROUND LEVEL) $> 3''$ & $< 5''$ TOTAL # STEMS (MAXIMUM DIAMETER AT GROUND LEVEL) $\geq 5''$ HABITAT PRESENT (CIRCLE ONE): ☐ RIPARIAN, ☐ NON-RIPARIAN TOTAL # EXIT HOLES:

NOTES:

EDAW Inc
2022 J Street, Sacramento, California 95811
T 916.414.5800 F 916.414.5850 www.edaw.com

June 18, 2008

Susan Jones
U.S. Fish and Wildlife Service
San Joaquin Valley Branch
2800 Cottage Way, Room W2605
Sacramento, CA 95825-1846

Subject: Results of Least Bell's Vireo Surveys for the Westside Parkway Project in the City of Bakersfield

Dear Ms. Jones:

The purpose of this letter is to present the methods and results of least Bell's vireo surveys conducted for the Westside Parkway project in the City of Bakersfield, California.

Background

The biological opinion, as amended for the Westside Parkway Project (1-1-04-F-0194), required that the U.S. Department of Transportation and Federal Highway Administration conduct a study to determine the status of least Bell's vireo on the Kern River. A least Bell's vireo habitat assessment was conducted in 2004 from Hart Memorial Park to Interstate 5 (Southern Sierra Research Station 2004, Appendix A). After reviewing the assessment, the U.S. Fish and Wildlife Service (USFWS) concluded that focused surveys for least Bell's vireo were necessary for the Westside Parkway to determine the presence/absence of the species between State Route 99 and Heath Road. USFWS requested that the survey area include habitat patches identified as potentially suitable in the 2004 habitat assessment (Montgomery, pers. comms., 2007, 2008). The Thomas Roads Improvement Program retained EDAW to conduct the surveys.

Methods

Before conducting surveys, EDAW biologists reviewed records from the California Natural Diversity Database (CNDDB 2008) to determine the current geographic range of the least Bell's vireo in Kern County and in surrounding counties. Potential breeding habitat in the survey area was identified using 2006 high-resolution aerial photographs (City of Bakersfield 2006) of the Kern River between Heath Road and SR-99 (Exhibit 1). A habitat assessment was conducted by EDAW biologists on April 8, 2008. Potential habitat included all areas that supported dense riparian vegetation dominated by Fremont cottonwood (*Populus fremontii*), mulefat (*Baccharis salicifolia*), or willow (*Salix* spp.).

Focused surveys for least Bell's vireo were conducted in suitable habitat patches on April 9, May 15, and June 4, 2008. Two EDAW biologists listened for the diagnostic song and call of the vireo and searched potential habitat using binoculars. A recording of the song of the least Bell's vireo was broadcast using a mini-amplifier speaker in areas considered potential habitat. All surveys were conducted between dawn and 11:00 a.m. by Stephanie Coppeto and Leo Edson. Mr. Edson is authorized to survey for least Bell's vireo under a USFWS recovery permit under Section 10(a)(1)(A) of the federal Endangered Species Act (ESA).

Results and Discussion

Geographic Range

The geographic range of least Bell's vireo does not include the Westside Parkway (Exhibit 2). The nearest documented occurrence of a least Bell's vireo is 60 miles southwest of the Parkway (CNDDDB 2008).

Habitat Assessment

Three patches—the Park on River Walk, Truxtun Pond, and Yokuts Park—were identified as potential breeding habitat for least Bell's vireo (Exhibits 1 and 3). The Park on River Walk (38 acres) and Truxtun Pond (15 acres) contained habitat patches with stratified canopies, dense understories within 1–2 meters of the ground, and vegetation communities composed of cottonwood, arroyo (*S. lasiolepis*) and sandbar willow (*S. exigua*), tobacco bush (*Ceanothus velutinus*), mulefat, and valley oak (*Quercus lobata*). Yokuts Park (14 acres) contained a suitable patch of sandbar willow with a stratified canopy of cottonwood and valley oak.

Focused Surveys

Least Bell's vireo was not detected during focused surveys conducted in the Park at River Walk, Truxtun Pond, and Yokuts Park. A total of 68 birds species were documented by EDAW biologists during the surveys (Appendix B).

Conclusions

Least Bell's vireo does not breed in the area of the Westside Parkway, and little potential habitat for the species is present. The documented least Bell's vireo occurrence nearest to the Westside Parkway is located 60 miles to the southwest.

Sincerely,

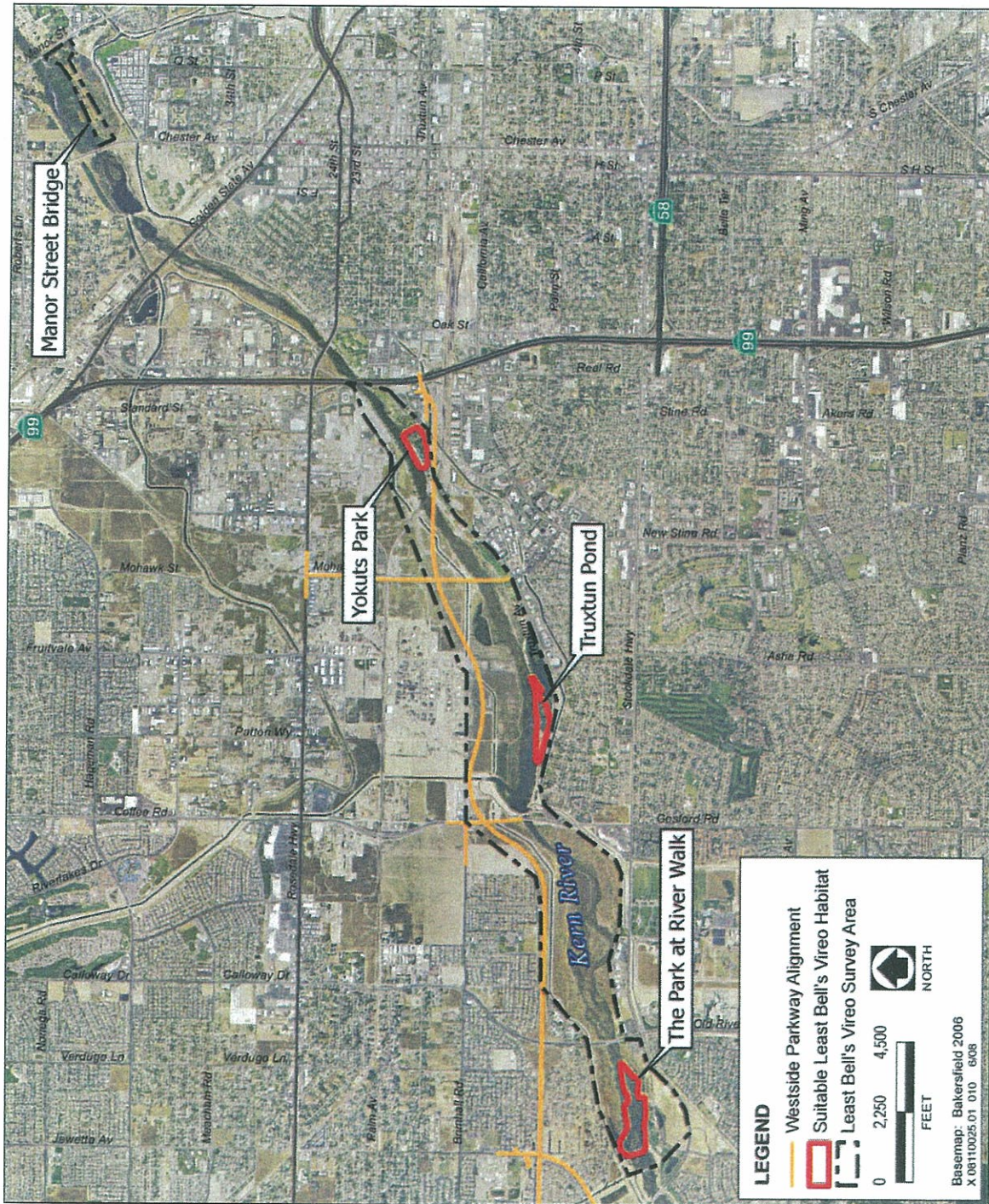


Stephanie Coppeto
Wildlife Biologist

Susan Jones
U.S. Fish and Wildlife Service
San Joaquin Valley Branch
June 18, 2008
Page 3

References

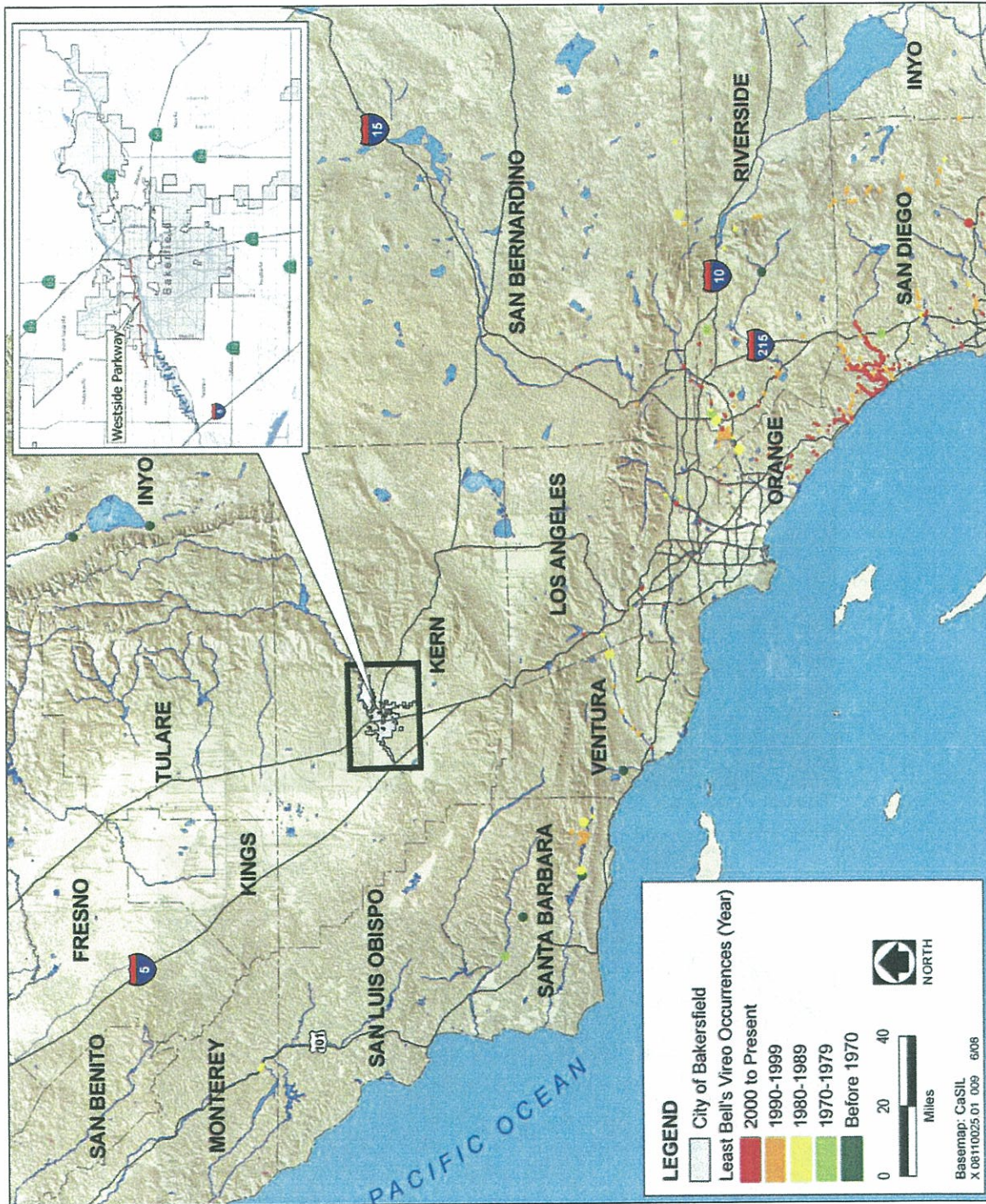
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- City of Bakersfield. 2006. Aerial images for City of Bakersfield and parts of unincorporated Kern County.
- CNDDDB. See California Natural Diversity Database.
- Montgomery, Richard. Wildlife biologist. U.S. Fish and Wildlife Service, Sacramento, CA. August 23, 2007—e-mail correspondence with Stephanie Coppeto of EDAW, David Clark of Parsons, Zachary Parker of the California Department of Transportation, Susan Jones of USFWS, and Julie Vance of the California Department of Fish and Game regarding the 2004 habitat assessment of the Westside Parkway for least Bell's vireo and the biological opinion requirement for focused surveys for least Bell's vireo; March 4, 2008—e-mail correspondence with Stephanie Coppeto and Susan Jones regarding the least Bell's vireo study area and e-mail correspondence regarding USFWS approval of the least Bell's vireo survey methods.
- Southern Sierra Research Station. 2004 (August). *2004 Least Bell's Vireo Habitat Assessment for the Westside Parkway Project*. Bakersfield, CA.



Source: Data compiled by EDAW in 2008

**Least Bell's Vireo Survey Area and Suitable Habitat Patches
 for the Westside Parkway, Bakersfield, California**

Exhibit 1



Source: Data compiled by EDAW in 2008

Least Bell's Vireo Geographic Range

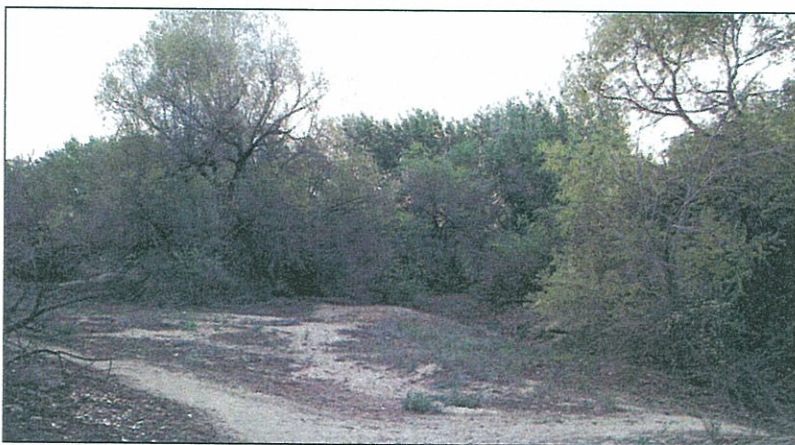
Exhibit 2



The Park at River Walk. (EDAW 2008)



Truxtun Pond Park. (EDAW 2008)



Yokuts Park. (EDAW 2008)

**Representative Photos of Three Suitable Habitat Patches for Least Bell's Vireo
in the Westside Parkway, Bakersfield, California**

Exhibit 3

EDAW | **AECOM**

APPENDIX A

2004 Least Bell's Vireo Habitat Assessment for the Westside Parkway Project, Bakersfield, CA

**2004 Least Bell's Vireo Habitat Assessment for the
Westside Parkway Project, Bakersfield, CA**

Prepared for:

**URS Corporation
2020 East First St., Suite 400
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and

**City of Bakersfield
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1501 Truxtun Avenue
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August 2004

INTRODUCTION

The least Bell's vireo (*Vireo bellii pusillis*) is a migratory songbird that historically was a widespread breeder throughout California's Central Valley, the coastal riparian areas of California, and northern Baja California (U.S. Fish and Wildlife Service 1998). The species is a riparian obligate that is known to inhabit a variety of habitat types, including cottonwood-willow woodlands and mule fat scrub (Brown 1993). Due to habitat destruction and degradation in California, less than ten percent of riparian woodlands in existence during the 1850's remain today and those that remain are highly fragmented (Smith 1977). With this loss of habitat many riparian obligate plant and animal species are considered at threat or endangered. This includes the least Bell's vireo which was once considered one of California's most abundant species. In response to its decline, the California Fish and Game Commission designated the least Bell's vireo as endangered in 1980 under the California Endangered Species Act of 1970 and the federal government did likewise in 1986 (U.S. Fish and Wildlife Service 1986).

The purpose of this study is to assess the distribution of suitable habitat for least Bell's vireos along the Kern River from Hart Memorial Park to Interstate 5 in Bakersfield and Kern County, CA. This work was done in order to meet mitigation requirements outlined in the USFWS Biological Opinion (BO) 1-98-F-139 dated 22 March 1999 and modified on 29 August 2000 for the Westside Parkway Project.

METHODS

2
Surveys were conducted between 6AM and 11AM over 5 days from the 8th to 14th of August 2004. For safety concerns, two surveyors were present each day. Habitat assessments were conducted along the Kern River from Hart Memorial Park to Interstate 5 (Figure 1, 2, and 3). When potentially suitable habitat was detected, more detailed habitat descriptions were recorded. Species and height estimates of vegetation were recorded along with a description of habitat composition. Suitable habitat was identified according to the parameters outlined in the Draft Recovery Plan of 1998 for the Least Bell's Vireo by the US Fish and Wildlife Service. According to this plan, the two critical features of their habitat are (1) the presence of dense cover within 1-2 meters of the ground, where nests are typically placed and (2) a dense, stratified canopy for foraging. Opportunistic bird surveys were also conducted, noting all species detected by sight and sound.

RESULTS AND DISCUSSION

The majority of the Kern River surveyed consists of habitat unsuitable for breeding least Bell's vireos. The composition of the unsuitable habitat includes small patches of vegetation with little, if any, structure. The habitat throughout much of the river commonly consisted of only scattered trees including saltcedar (*Tamarix chinensis*), mesquite (*Prosopis spp.*), willows (*Salix spp.*) and the occasional Fremont cottonwood (*Populus fremontii*) (Figure 4). The understory is sparse, if any at all, with small patches

of mule fat (*Baccharis salicifolia*), salt bush (*Atriplex lentiformis*), *Bassia hyssopifolia*, and young willows (Figure 5).

However, three habitat patches along the Kern River were determined to be possible breeding habitat for least Bell's vireos. Two smaller patches were found adjacent to the proposed Westside Parkway Project area. One, east of West Truxtun Pond (Figures 6 & 7) is 1.12 hectares in size while the other at Yokuts Park (Figures 8 & 9) is only 0.37 hectares. Upriver from these patches and the project area, the largest and most promising patch was found (Figures 10 & 11) west of the Manor Street bridge.

At Truxtun Pond, vegetation consists of mature canopy trees including, valley oaks (*Quercus lobata*) and cottonwoods ranging up to 10 meters in height. The observed vegetation in the understory includes dense patches of mule fat and willow saplings 2 to 4 meters in height. The Yokuts Park patch again demonstrates a stratified canopy with structure ranging through to the canopy. The canopy consists of mature cottonwood, willows, valley oak, and sycamore (*Platanus racemosa*) ranging from 8 to 12 meters in height. Within the understory, thick patches of tree tobacco (*Nicotiana glauca*) and willow stand 2 to 4 meters in height. The Manor Street bridge patch was approximately 4.69 hectares in size. Mature cottonwoods and willows create a stratified canopy 7 to 10 meters high. This canopy covers a mosaic understory of open patches and dense stands of mule fat, elderberry (*Sambucus mexicana*), with interspersed saltcedar.

Forty-seven native bird species and three non-native bird species were detected during our surveys (Appendix 1). The number of birds detected would probably be higher earlier in the summer, when breeding activity is much greater. The Loggerhead Shrike, which is designated as a "Species of Special Concern" by the California Department of Fish and Game, was detected. However, because of the time of year that these surveys were conducted, it can be assumed that the individuals detected were migrants.

CONCLUSION

Although the expectation of detecting breeding least Bell's vireos along the Kern River is low due to the majority of poor habitat, the three suitable patches described above may provide enough habitat to support breeding vireos. Thus, these three patches should be surveyed for breeding least Bell's vireos from April 10th through July 1st in the 2005 breeding season. ?

LITERATURE CITED

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1-2 *in* A. Sands, ed. Riparian forests in California: their ecology and conservation. Inst. Ecol. Publ. 15.

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plants; Determination of endangered status for the least Bell's vireo. Final Rule.
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ACKNOWLEDGEMENTS

We would like to thank Bob Barnes and Rachel del Rio for their assistance in conducting surveys.

PROPOSED LEAST BELL'S VIREO SURVEYS FOR THE WESTSIDE
PARKWAY PROJECT 2005

SCOPE OF WORK

This scope of work is intended to focus the field survey requirements of Term and Condition No. 4e of the United States Fish and Wildlife Service's (USFWS) Biological Opinion (BO) 1-1-98-F-139 dated 22 March 1999 and modified on 29 August 2000 for the Westside Parkway (formerly known as the Kern River Freeway). The BO was originally prepared for the Tier I project documentation for State Route 58. This document was concluded in 1999 with Caltrans as the project proponent and involved a new alignment for SR58 between SR99 and Interstate 5 in Bakersfield, California. After the record of decision for this document was issued, it was determined by Caltrans that a connection to SR99 with this facility was not possible, limiting its use as a State Route. Therefore, the City of Bakersfield became Lead Agency on the project, identifying it as a City owned and operated facility. The City downsized the project, shortening the length of the original project and right of way width (now 64 meters from the original 91 meters) and renamed the facility the Westside Parkway. However, the BO issued at the conclusion of the Tier I document is still in effect for the Westside Parkway. A portion (first phase) of the work necessary to satisfy the minimum requirements of the term and condition is included in this proposed scope and fee.

We will survey for Least Bell's Vireo (*Vireo bellii pusillus*) at the three suitable patches that we identified along the Kern River: near Truxtun Pond, Yokuts Park and Manor

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Street bridge. We will follow USFWS Survey Guidelines for Least Bell's Vireo, revised January 19, 2001. This protocol requires that surveys be conducted eight times between April 10 and July 31. The surveys must be spaced at least 10 days apart. All surveyors will be familiar with the song and calls of the Bell's Vireo. If Bell's Vireos are detected, we will record the date, time, GPS location and any behavioral information in our notebooks. The purpose of the study is to determine whether Least Bell's Vireos are using areas on the Kern River between Hart Park and Interstate 5. The likelihood of Least Bell's Vireo within the project area is expected to be very low. We will also record all bird species detected. We estimate that it will take 2 mornings to thoroughly cover the areas. In addition, two people will be required to survey some stretches of the river due to safety concerns.

COST ESTIMATE

FIELDWORK

| | |
|--|---------------|
| Each survey: | |
| 6 hours per survey day x 2 people x 2 days @ \$60 per hour | \$ 1,440 |
| Mileage 135 miles x 2 days @ 0.37 per mile | <u>\$ 100</u> |
| Subtotal | \$ 1,540 |
| Total fieldwork cost: | |
| 8 surveys @ \$1,540 per survey | \$12,320 |

REPORT PREPARATION

| | |
|--------------------------|----------|
| 75 hours @ \$60 per hour | \$ 4,500 |
|--------------------------|----------|

| | |
|-----------------------------|-----------------|
| TOTAL COST ESTIMATE: | \$16,820 |
|-----------------------------|-----------------|



Figure 4. Sparse trees

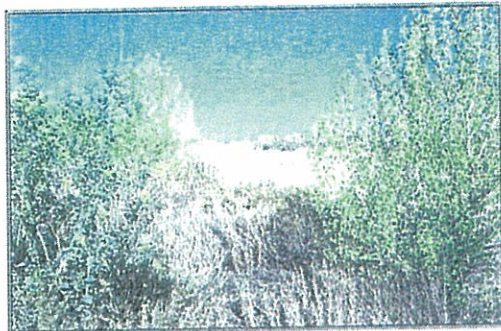


Figure 5. Thin understory



Figure 6. Truxtun Pond patch



Figure 7. Truxtun Pond patch



Figure 8. Yokuts Park patch



Figure 9. Yokuts Park patch.



Figure 10. Manor Bridge patch



Figure 11. Manor Bridge patch

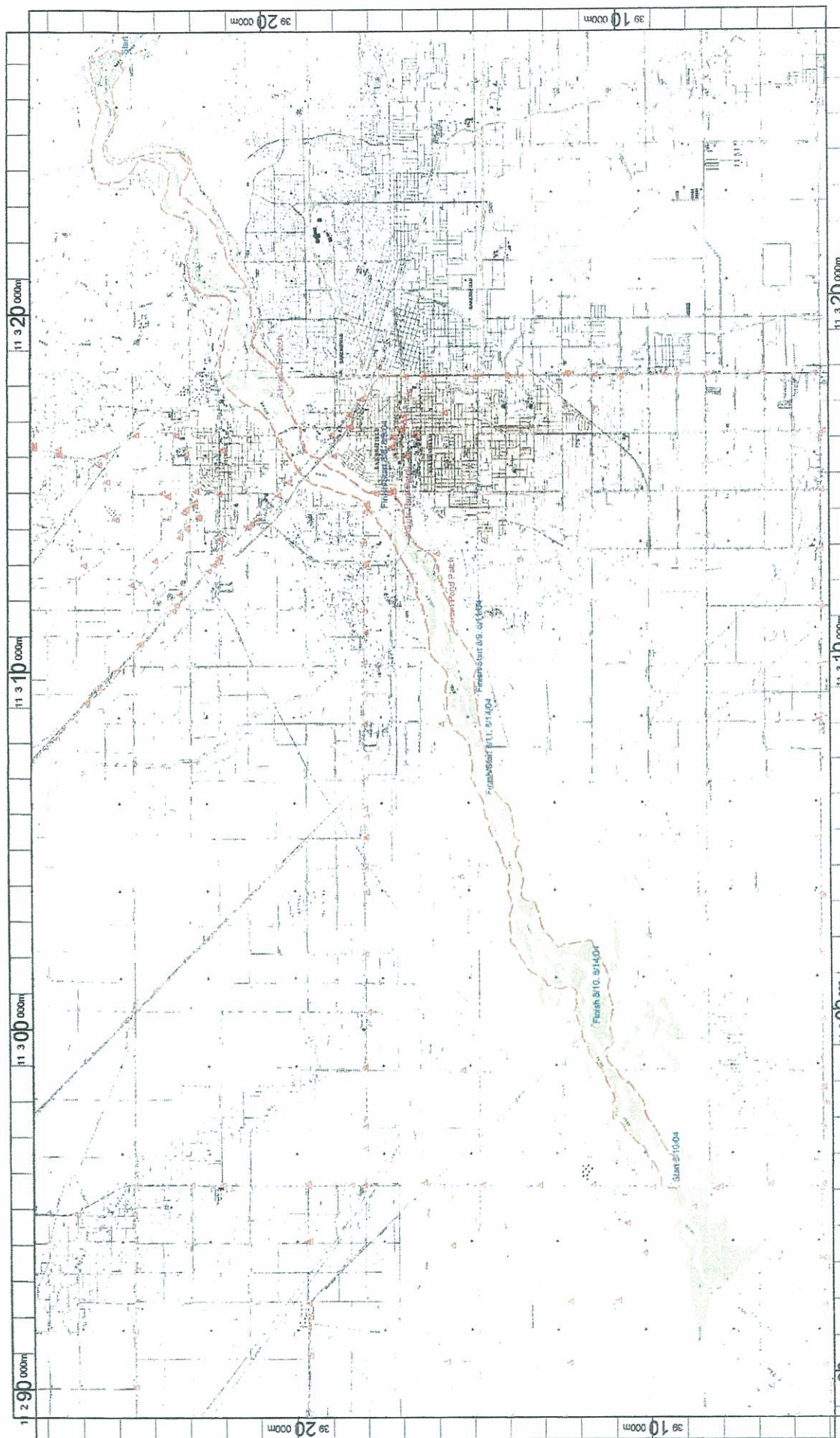
APPENDIX 1 BIRD SPECIES DETECTED

| | |
|---------------------------|----------------------------------|
| American Coot | <i>Fulica americana</i> |
| American Crow | <i>Corvus brachyrhynchos</i> |
| American Kestrel | <i>Falco sparverius</i> |
| American Robin | <i>Turdus Migratorius</i> |
| Anna's Hummingbird | <i>Calypte anna</i> |
| Ash-throated Flycatcher | <i>Myiarchus cinerascens</i> |
| Barn Swallow | <i>Hirundo rustica</i> |
| Bewick's Wren | <i>Thryomanes bewickii</i> |
| Black-chinned Hummingbird | <i>Archilochus alexandri</i> |
| Black-headed Grosbeak | <i>Pheucticus melanocephalus</i> |
| Black Phoebe | <i>Sayornis nigricans</i> |
| Blue Grosbeak | <i>Passerina caerulea</i> |
| Brewer's Blackbird | <i>Euphagus cyanocephalus</i> |
| Bushtit | <i>Psaltiriparus minimus</i> |
| California Gull | <i>Larus californicus</i> |
| California Quail | <i>Callipepla californica</i> |
| California Thrasher | <i>Toxostoma redivivum</i> |
| Caspian Tern | <i>Sterna caspia</i> |
| Cedar Waxwing | <i>Bombycilla cedrorum</i> |
| Common Raven | <i>Corvus corax</i> |
| Double-crested Cormorant | <i>Phalacrocorax auritus</i> |
| Downy Woodpecker | <i>Picoides pubescens</i> |
| European Starling | <i>Sturnus vulgaris</i> |
| Great Egret | <i>Ardea alba</i> |
| Great-Horned Owl | <i>Bubo virginianus</i> |
| Greater Yellowlegs | <i>Tringa melanoleuca</i> |
| Green Heron | <i>Butorides virescens</i> |
| House Finch | <i>Carpodacus mexicanus</i> |
| Killdeer | <i>Charadrius vociferus</i> |
| Loggerhead Shrike | <i>Lanius ludovicianus</i> |
| Mallard | <i>Anas platyrhynchos</i> |
| Mourning Dove | <i>Zenaida macroura</i> |
| Northern Flicker | <i>Colaptes auratus</i> |
| Northern Harrier | <i>Circus cyaneus</i> |
| Northern Mockingbird | <i>Mimus polyglottos</i> |
| Nuttall's Woodpecker | <i>Picoides nuttallii</i> |
| Orange-crowned Warbler | <i>Vermivora celata</i> |
| Pied-billed Grebe | <i>Podilymbus podiceps</i> |
| Red-Shouldered Hawk | <i>Buteo lineatus</i> |
| Red-tailed Hawk | <i>Buteo jamaicensis</i> |
| Red-winged Blackbird | <i>Agelaius phoeniceus</i> |
| Rock Pigeon | <i>Columba livia</i> |

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APPENDIX 1 CONTINUED

| | |
|----------------------------|-------------------------------|
| Rose-ringed Parakeet | <i>Psittacula krameri</i> |
| Rufous/Allen's Hummingbird | <i>Selasphorus spp.</i> |
| Song Sparrow | <i>Melospiza melodia</i> |
| Tree Swallow | <i>Tachycineta bicolor</i> |
| Turkey Vulture | <i>Cathartes aura</i> |
| Western Kingbird | <i>Tyrannus verticalis</i> |
| Western Meadowlark | <i>Sturnella neglecta</i> |
| Western Scrub-Jay | <i>Aphelocoma californica</i> |



Location: 11 0308302 E 3615687 N
Caption: Figure 1. Westside Parkway Least Bell's Vireo habitat assessment survey area. Dashed line = survey area.

Name: GOSFORD
Date: 10/5/2004
Scale: 1 inch equals 1.515 miles

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DEPARTMENT OF TRANSPORTATION

DISTRICT 6

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*Flex your power!
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June 25, 2009

Ms. Jennifer Schofield
United States Fish and Wildlife Service
Endangered Species Division
Sacramento Fish and Wildlife Office
2800 Cottage Way, W-2605
Sacramento, CA 95825-1846

Subject: San Joaquin Kit Fox 60-Day Preconstruction Survey Results for Phase 2 and 3 of the Westside Parkway Mohawk Street Project (1-1-98-F-139 as amended 1-1-04-F-0194 and 21420-2008-0368) in Bakersfield, Kern County, California

Dear Ms. Schofield,

The California Department of Transportation (Caltrans) is sending the enclosed Pre-construction Survey Result as a requirement of the terms and conditions of the U.S. Fish and Wildlife Service (USFWS) Biological Opinion (BO) (1-1-98-F-139 as amended 1-1-04-F-0194 and 21420-2008-0368) for Phase 2 and 3 of the Westside Parkway Project from Mohawk Street to Calloway Drive in Bakersfield, Kern County, California.

On December 10-12 and 16, 2008, EDAW and Paul Pruett and Associates (PPA) conducted a 60-day pre-construction clearance survey for San Joaquin kit fox (SJKF) of the project area, from Mohawk Street, west to Calloway Drive (Attachment 1). The survey was conducted by qualified biologists and within the guidelines established by the USFWS and California Department of Fish and Game (DFG). The site of the project construction area and a surrounding 250-foot buffer was walked on a combination of north/south and east/west 30 ft transects ensuring 100% visual coverage. The survey identified 15 potential SJKF dens, one artificial den, four coyote dens, one elderberry shrub, and one burrowing owl (see Attachment 1, 2, and 3). Because preparations to construct the Westside Parkway, including Mohawk Street to Calloway Drive, were put on hold on December 17, 2008, results from this survey were not transmitted. However, all of these previously identified potential SJKF dens, the four coyote dens, burrowing owl location, and elderberry shrub were re-visited during a second 60-day pre-construction clearance survey conducted May 20-22, 2009.

From May 20-22, 2009, EDAW and PPA biologists conducted a second 60-day pre-construction survey for SJKF of the project area. All of the potential SJKF dens identified during the December 2008 survey were located during the May 2009 survey. No SJKF or burrowing owls were observed during the May 2009 survey. No sign of SJKF scat, tracks, or

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prey remains were observed at any of the previously identified potential SJKF dens, artificial den, and coyote dens. Biologists identified one new potential SJKF den (Point ID 22) and one new artificial SJKF den (Point ID 23) in the project area (see Attachment 1). The new potential SJKF den showed sign of fresh digging and skunk tracks (see Attachment 3). The artificial den showed no sign of use by SJKF or any other animal. No other new evidence of SJKF in the project area was identified during the May 2009 60-day preconstruction survey.

The burrowing owl identified during the December 2008 survey was resurveyed for during January 9-19, 2009 when EDAW biologists conducted a burrowing owl survey of the project area to determine if the owl was developing a breeding territory in the project area. The burrowing owl survey was conducted in accordance with the California Burrowing Owl Consortium's Burrowing Owl Survey Protocol and Mitigation Guidelines (CBOC 1993). Biologists were unable to locate the owl, sign of owl, or potential burrows during the January surveys. For this reason, the owl observed during the December 2008 survey is presumed to have been a transient, moving through the project area, and not developing a breeding territory in the alignment location. The elderberry shrub identified during the December 2008 survey was resurveyed during May 2009 for the presence of the Valley Elderberry Longhorn Beetle (VELB) and exit holes. No VELB or exit holes were identified on the shrub. The shrub is located approximately 601 feet from construction activities and will not be affected by the project. We recommend creating a buffer of 100 feet from the drip line of the shrub to protect the shrub during construction.

A total of 16 potential SJKF dens, two artificial dens, and four coyote dens were identified during the pre-construction clearance surveys (December 2008 and May 2009) of the Westside Parkway from Mohawk Street to Calloway Drive. Twelve potential SJKF dens (Point IDs 1, 6, 10, 11, 12, 13, 14, 15, 16, 17, 21, and 22), and two coyote dens (Point IDs 5 and 19) are located inside or on the border of permanent construction impacts (see Attachment 1). One potential kit fox den (Point ID 20) and two artificial dens (Point IDs 7, and 23) are located within the limits of temporary construction impacts (e.g., staging, access route; see Attachment 1). Three potential SJKF dens (Point IDs 2, 9, 18) and two coyote dens (Point IDs 3, and 8) are located more than 100 feet from permanent and temporary impacts of construction (see Attachment 1).

Caltrans would like to request approval to monitor the 12 potential SJKF dens (Point IDs 1, 6, 10, 11, 12, 13, 14, 15, 16, 17, 21, and 22), and two coyote dens (Point IDs 5 and 19) that are inside or on the border of permanent impacts for three consecutive nights. If no SJKF are found during three consecutive nights of monitoring, we request permission to mechanically excavate the earthen potential dens and sand bag the cement and pipe dens immediately following monitoring. Mechanical excavation is recommended as opposed to hand excavation because hand excavation could take, at times, a full day to excavate one den. In addition, we would like to propose that because of the large number of dens to be excavated. Den excavation would follow the procedures outlined in the USFWS *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to Ground Disturbance*. If at any time during excavation a SJKF is found, excavation will cease immediately, monitoring will resume, and Caltrans will consult with the USFWS and DFG.

Ms. Jennifer Schofield
June 25, 2009
Page 3

In addition, Caltrans would like to request approval to monitor one earthen potential den (Point ID 20) and the two artificial dens (Point IDs 7 and 23) that are within the limits of temporary construction impacts for three consecutive nights. If no SJKF are found during the three nights of monitoring, we request approval to sandbag the entrance to these burrows immediately following monitoring and establish a 50 foot buffer around the den and monitor during construction. Sand bags can be removed from all artificial and potential dens in temporary impact areas following the completion of construction. We request approval to flag a protective buffer area of 100 feet around three potential dens (Point IDs 2, 9, 18) and two coyote dens (Point IDs 3, and 8) that are located more than 100 feet from the construction limits.

All construction personnel would receive an environmental awareness program prior to construction. The program will provide workers with information on their responsibilities with regard to sensitive species, including locations of environmentally sensitive areas, exclusion zones, timing constraints, and communication with biological monitors. The program will include the locations of the potential and artificial SJKF dens and coyote dens in the temporary impact area and avoidance measures. EDAW biologists will provide a map of all resource locations to the construction crew leader prior to the start of construction that clearly shows locations of excavated, sandbagged, and buffered dens. EDAW biologists will monitor sandbagged dens daily during construction to ensure no bags have been dislodged from potential den entrances. For the dens located in the permanent impact area, a biological monitor will be present when sandbagged dens are excavated during construction.

Construction of the Westside Parkway between Mohawk Street and Calloway⁴ anticipated to begin in September 2009. A two-week preconstruction clearance surveys for special-status species will be conducted in mid-August, 2009.

If you have any questions, please call Zachary Parker, Senior Environmental Planner, at (559) 243-8196 or Heather Baker, Associate Environmental Planner/Biologist, at (559) 243-8288.

Sincerely,



ZACHARY PARKER
Branch Chief, Central Region Biology

Enclosure

cc:

Ms. Jennifer Schofield
June 25, 2009
Page 4

cc:

Laura Peterson-Diaz, California Department of Fish and Game
David Clark, Parsons
Ted Wright, City of Bakersfield
Cindy Davis, EDAW, Inc
Kirstin Helton, California Department of Transportation

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January 29, 2009

David Clark
Program Environmental Manager
Parsons
900 Truxtun Avenue Suite 201
Bakersfield, CA 93301

Subject: Westside Parkway Phase 2 Results of Burrowing Owl Surveys

Dear Mr. Clark,

Biologists from EDAW and Paul Pruett and Associates identified a Western burrowing owl (*Athene cunicularia*) during 60-day preconstruction surveys for the Phase 2 Westside Parkway alignment between Mohawk Street and Coffee Road. The owl was observed on December 10 and 11, 2008 north of the Kern Riverbed, south of the Big West Refinery, in the proposed Phase 2 alignment location (Attachment 1). The location of the observed owl was recorded at UTM 11S 0311502 3015845.

Burrowing owls are classified by the California Department of Fish and Game (CDFG) as a species of special concern and are protected under Fish and Game Code Section 3503.5. Their nesting season is February 1 through August 31. According to the *Burrowing Owl Survey Protocol and Mitigation Guidelines* put out by the CDFG (1993), owls may not be excluded from their burrows during the nesting season and a buffer zone of 250 feet must be maintained. Burrowing owl compensatory mitigation also requires that a minimum of 6.5 acres of foraging habitat be preserved contiguous with occupied burrow sites for each pair of breeding burrowing owls (with or without dependent young) or single unpaired resident bird that is evicted. Because biologists were unable to determine if the identified burrowing owl was a resident and potentially nesting in the project area during 60-day preconstruction surveys, and because road construction was delayed, biologists from EDAW and Paul Pruett and Associates continued to monitor the site to further assess burrowing owl activity.

Burrowing owl monitoring was conducted between January 9 and January 19, 2009, excluding weekends. Biologists surveyed the burrowing owl site at dawn and dusk on January 9, 2009 and then every morning from January 12 to January 19, 2009. The site was visited in the morning or evenings hours because these are active hours for the owls and therefore maximized the chances of owl detection. During surveys, biologists scanned a 500-foot radius survey area in accessible habitat around the location where the owl was initially observed (Attachment 1); Big West Property was not surveyed. Surveys provided 100% visual coverage for owls and their sign, including whitewash, owl pellets, feathers, potential burrows, and perching sites. The survey area has numerous old concrete foundations, old pipes under the foundations, pipes sticking out of the ground, and a chain link fence adjacent to the property. Biologists surveyed these and all site features to locate a potential burrow or sign of owl occupation.

No burrowing owl or sign of burrowing owl was detected in the survey area between January 9 and January 19, 2009. Based on the results of these surveys, EDAW believes that the owl observed on December 10 and 11, 2008 may have been a transient, moving through the project area, and not developing a breeding territory in the alignment location. No further monitoring is recommended at this

time but biologists will repeat 60-day and conduct two-week preconstruction surveys in this project area prior to road construction.

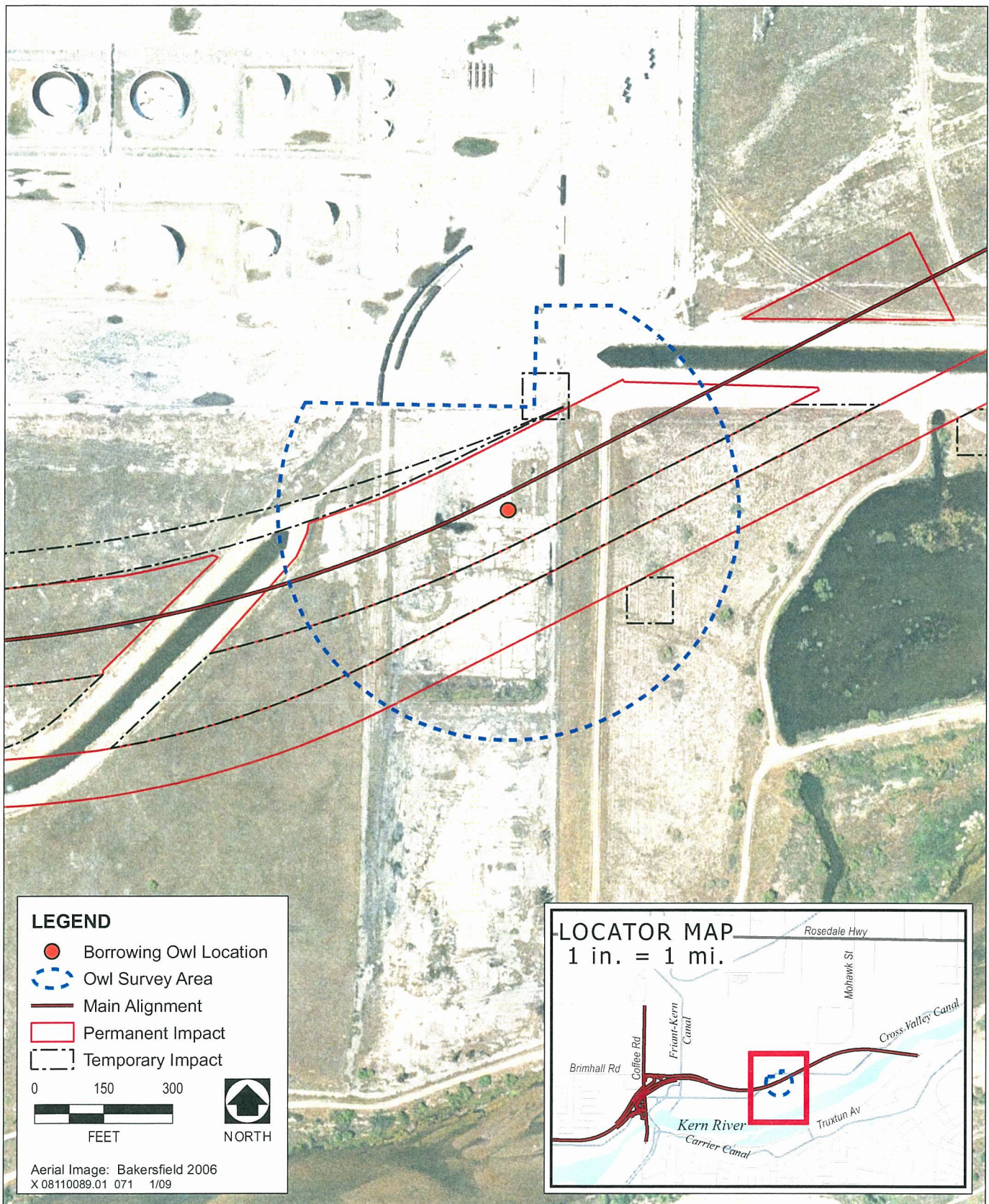
Please let me know if you have any questions or comments.

Sincerely,

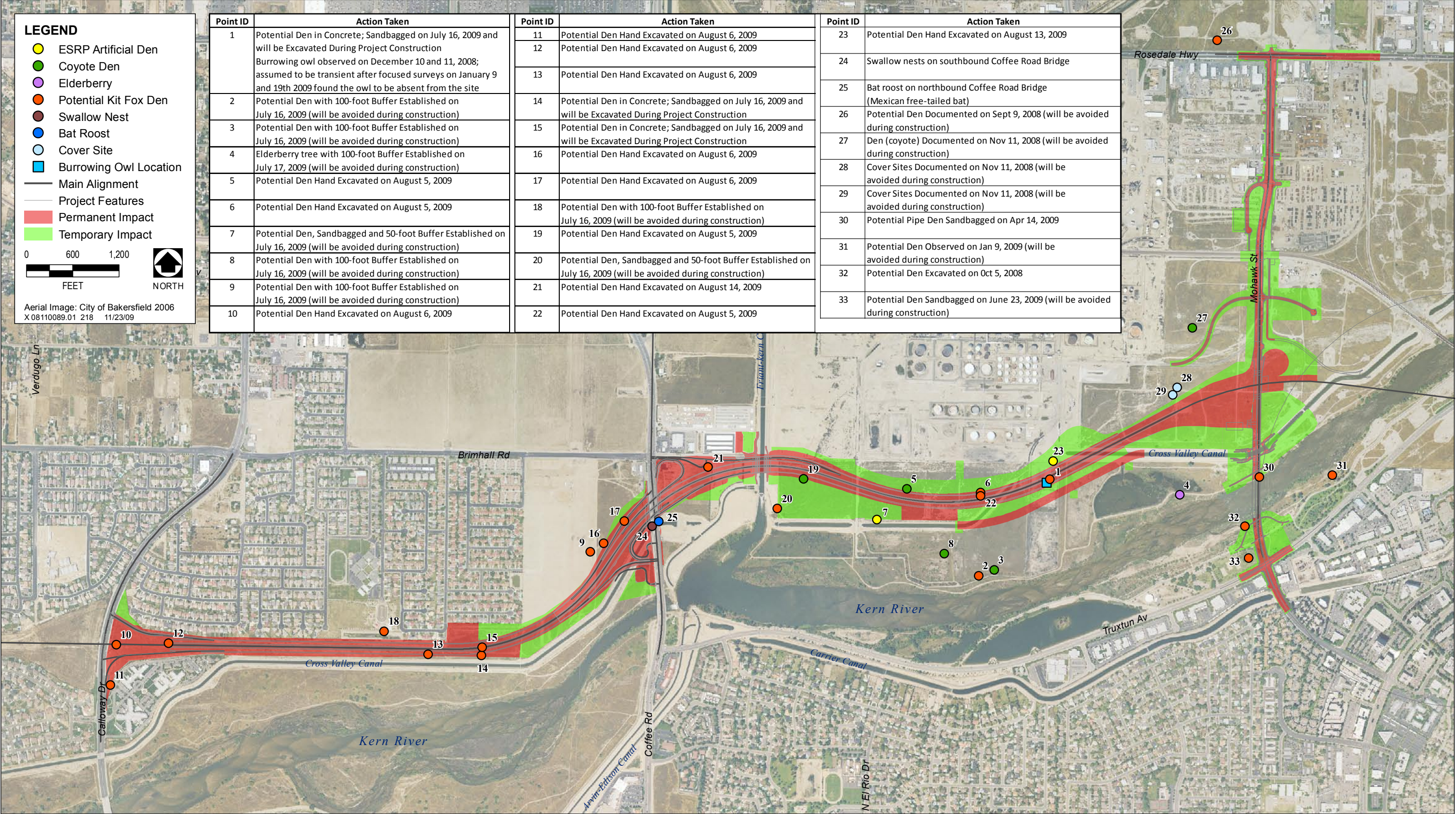
A handwritten signature in black ink, appearing to read 'Stephanie Coppeto', written in a cursive style.

Stephanie Coppeto
Wildlife Biologist

cc: 08110089.01 / Chron
P:\2008\08110089.01 TRIP Compliance\PreConstruction and Construction Surveys\Westside Parkway\Phases 2 and 3\Burrowing Owl_WSP_Phase2_SurveyResults_012809.doc



Source: AECOM Transportation 2008, Kern County 2008, EDAW 2008



Appendix I List of Preparers

Julia R. Black, Technical Writer. Bachelor of Arts, English, California State University, Fullerton; 11 years of writing and editing experience.
Contribution: Performed technical editing of the Natural Environment Study and Jurisdictional Delineation Report.

Brian Daniels, Ornithologist. Bachelor of Science, Zoology, California State University, Long Beach; 36 years of experience in biological resources, specializing in ornithology. Contribution: Completed Swainson's Hawk Surveys.

Jade Dean, Graphic Information Systems Technician. Bachelor of Arts, Geography, California State University, Long Beach. 3 years of experience in Geographic Information Systems mapping. Contribution: Prepared figures for Geographic Information Systems information used in the Natural Environment Study and the Jurisdictional Delineation.

Pamela De Vries, Botanist. Master of Science, Biology, California State University, Fullerton; 21 years of experience in biology and restoration ecology.
Contribution: General plant surveys, special status plant habitat assessment, vegetation mapping, and focused special status plant survey.

Andrea Edwards, Botanist. Bachelor of Science, Biology and Anthropology, Trinity University, San Antonio, Texas; 11 years of experience in plant biology, biological resource evaluations, natural resource planning, and habitat restoration. Contribution: Assisted with special status plant surveys.

Johnnie F. Garcia, Geographic Information Systems Specialist. Bachelor of Arts, Geography, University of California, Santa Barbara; 6 years of experience in Geographic Information Systems mapping. Contribution: Prepared figures and coordinated with applicable agencies for Geographic Information Systems information used in the Natural Environment Study and Jurisdictional Delineation.

Otto Gasser, Retired Professor (Cal Poly Pomona)/Biological Field Assistant. Ed.D Educational Psychology, UCLA. 10 years experience assisting in botanical field surveys including rare plant surveys. Contribution: General plant survey,

habitat assessment, vegetation mapping, and focused special status plant survey.

Sheryl A. Kristal, Word Processor; Microsoft Office Specialist. General Studies, Golden West College; 7 years of word processing experience. Contribution: Formatted the Environmental Impact Report/Environmental Impact Statement, the Natural Environment Study, the Jurisdictional Delineation, the Archaeological Survey Report.

Sandra Leatherman, Botanist. Bachelor of Arts, Biology, California State University, Fullerton; 21 years of experience in plant biology; mitigation monitoring; and the performance of biological surveys, restoration studies, and habitat evaluations. Contribution: Assisted with special status plant surveys.

Gary A. Medeiros, Associate Principal, Regulatory Services. Bachelor of Arts, Social Ecology, University of California, Irvine. 31 years of experience in natural resources policy planning, regulatory permitting, and permit compliance. Contribution: Conducted the jurisdictional delineation.

Lindsay A. Messett, Wildlife Biologist. Bachelor of Science, Ecology and Systematic Biology, Concentration: Wildlife Biology, California State Polytechnic University, San Luis Obispo. 12 years of experience in wildlife biology. Contribution: Conducted burrow survey for burrowing owl and potential den survey for San Joaquin kit fox at Stockdale Highway and State Route 43 (Enos Lane).

Jason Mintzer, Wildlife Biologist. Master of Arts, Education, Vanguard University, Costa Mesa, California; California Biology/Life Science Teaching Credential, California Commission on Teacher Credentialing; 9 years of experience in herpetology. Contribution: Assisted with the jurisdictional delineation.

Kimberly Oldehoeft, Wildlife Biologist. Master of Science, Biology: Behavior and Conservation, California State University, Long Beach; 11 years of experience in wildlife biology and conservation biology. Contribution: Conducted burrowing owl surveys and assisted with special status plant surveys.

Amber Oneal, Senior Project Manager/Ecologist. Master of Science, Biology, University of California, Riverside; 14 years experience in ecology and

environmental documentation. Contribution: Prepared the biological resources assessment sections of the Environmental Impact Report/Environmental Impact Statement and prepared the Natural Environment Study.

Allison Rudalevige, Ecologist and Regulatory Technician. Master of Science, Biology, University of California, Riverside; 8 years of experience in biological and jurisdictional resources. Contribution: Completed burrowing owl surveys; assisted in the preparation of biological resources assessment sections of the Environmental Impact Report/Environmental Impact Statement; completed the jurisdictional delineation survey and prepared the Jurisdictional Delineation Report; and assisted in the preparation of the Natural Environment Study.

